



LC SUPPLIES

The image displays a variety of Agilent LC supplies. In the background, a large, multi-tiered HPLC system is visible. In the foreground, there is a box of Agilent InfinityLab Poroshell 120 HPLC column, a large solvent reservoir bottle with a graduated scale, a pump assembly, and several other components including fittings, connectors, and a small Agilent logo. The background is a solid blue color.



Agilent Technologies



Agilent
CrossLab

From Insight to Outcome

**ACROSS THE LAB, AROUND THE WORLD,
WITH YOU EVERY STEP OF THE WAY.**

Real stories from the lab.

WHO WE ARE. WHAT WE DO.

Whatever your lab needs, Agilent CrossLab is ready to partner with you to create new and transformative opportunities. Together, we'll support your scientific and business goals with superior laboratory services, software, and consumables from Agilent. A direct connection to a global team of service experts delivers vital, actionable insights at every level for your lab.

Our solutions maximize performance, reduce complexity, and drive improved economic, operational, and measurable outcomes. And our innovative and comprehensive products generate immediate results and lasting impact.

Look out for CrossLab stories from the lab to find out how we can help.

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MAXIMIZE THE EFFICIENCY OF YOUR LC WORKFLOWS

The InfinityLab family is an optimized portfolio of LC instruments, columns, and supplies designed to work together seamlessly for maximum efficiency and performance—regardless of application area. Supporting your efforts to increase your analytical, instrument, and laboratory efficiency in your everyday work.



Achieve optimal LC performance with simplified laboratory solutions

From routine analysis to cutting-edge research, the InfinityLab family gives you the ability to:

- Maximize performance and efficiency of your LC workflows with the latest innovations
- Reduce costs with more efficient lab operations
- Easily identify the columns and supplies that work best with your Agilent InfinityLab LC Series instruments

The InfinityLab family provides the solutions you need to optimize your LC performance and achieve the highest operational efficiency.

InfinityLab supplies

The small parts of your workflow make a big difference in the quality of your results. Agilent InfinityLab supplies are a range of innovative consumables designed to optimize your liquid chromatography workflows. From maintaining your LC system, to controlling harmful solvent fumes, these innovative supplies solve your everyday laboratory problems. InfinityLab supplies enable you to work more efficiently, leaving you with more time and less frustration.



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Featured Products

Agilent 1260 Infinity II Prime LC

Achieve the highest convenience for your everyday analysis

The Agilent 1260 Infinity II Prime LC is the most capable and convenient LC within the 1260 Infinity II LC portfolio. Featuring an extended pressure range of up to 800 bar, enhanced quaternary mixing, and superior Agilent 1290 Infinity II technology it offers the highest ease-of-use and functionality for your everyday analysis.

- The 1260 Infinity II Flexible pump features an extended pressure range of up to 800 bar and superior quaternary mixing. Perfectly matching InfinityLab Poroshell 120 columns take you one step further in your everyday work enabling higher precision and accuracy.
- The InfinityLab LC Companion lets you access and control your instrument comfortably from your office or other locations
- The multiwash capability of the 1260 Infinity II multisampler cleans all relevant injection parts between runs for ultralow carryover. This sophisticated, integrated feature flushes the injection needle outside with three solvents and uses seat backflush procedures to reduce carryover to less than 10 ppm.
- Using shallow well-plate drawers, the 1260 Infinity II multisampler takes a maximum load of 16 microplates and up to 6,144 samples, the most of any single system for efficient sample handling and logistics
- The 1260 Infinity II MCT holds up to four columns with direct access to each column through a InfinityLab Quick Change switching valve, eliminating the need to disconnect and reconnect columns
- The Multipurpose valve allows you to purge your instrument via software, reducing the need for manual interaction
- BlendAssist delivers accurate buffer/additive blending without manual interaction for simplified workflows
- Intelligent System Emulation Technology (ISET) facilitates seamless transfer of methods between LCs regardless of the brand, delivering unchanged retention time and peak resolution
- Agilent's Instrument Control Framework (ICF) enables smooth control of Agilent LC instrumentation through third-party chromatography data systems
- Triple your sample capacity within the footprint of the 1260 Infinity II prime with the incredibly powerful Ultivo Triple Quadrupole LC/MS

Note: Take full advantage of the speed and performance capabilities of the Infinity II Prime LC system with 1000 bar rated InfinityLab Poroshell 120 columns. Robust 2.7 μm Poroshell particles operate at reduced backpressure, allowing high flow rates to be used for optimal separation efficiency and fast analysis. Turn to **Page 128** for details.



InfinityLab Capillary and Convenience Kits

Quickly access the essentials you need for optimal performance of your InfinityLab LC Series instrument.

Turn to **Page 3** or visit www.agilent.com/chem/capillaryfittingkits



InfinityLab Stay Safe Caps

Simplify every day solvent handling, safely and more reliably, with Stay Safe caps and ergonomic solvent bottles.

Turn to **Pages 25–26** or visit www.agilent.com/chem/staysafecaps

InfinityLab Quick Connect/Quick Turn Fittings

These award-winning fittings offer easy, leak-proof connections for every user, every time.

Turn to **Pages 103–106** or visit www.agilent.com/chem/infinitylabfittings



Smart InfinityLab Supplies

Automatically recognized by your InfinityLab LC Series instrument, these supplies provide critical information and full usage traceability for less downtime, greater operational efficiency, and confidence in results. Supplies include:

- InfinityLab Column ID tag
- InfinityLab Long Life HiS deuterium lamps with RFID tag
- InfinityLab Max-Light cartridge cells with RFID tag

Turn to **Pages 47–48, 72, 76** or visit www.agilent.com/chem/infinitylab

InfinityLab Poroshell 120

Agilent InfinityLab Poroshell 120 columns work seamlessly with InfinityLab LC Series supplies and instruments. These columns are available with a preprogrammed ID tag, allowing you to get the most from your column and instrument.

Turn to **Pages 128–131** or visit www.agilent.com/chem/poroshell-120



INSTRUMENT AND MODULE KITS

InfinityLab Convenience Kits

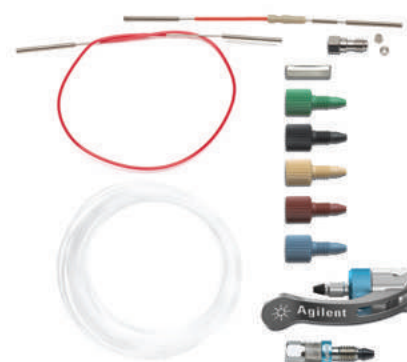
A carefully selected portfolio of InfinityLab supplies for efficient ramp up usage of new InfinityLab LC Series instruments.

InfinityLab Capillary Kits

A complete set of system capillaries, including InfinityLab fittings available in 0.17 and 0.12 mm internal diameters.

System Kits

| Description | Kit Contents | Part No. |
|--|---|-----------|
| Convenience Kits | | |
| InfinityLab convenience kit, for 1260 Infinity II LC | Includes solvent bottles 1 L (3 clear, 1 amber), identification rings and removable stickers for solvent bottles, vials (2 mL) clear with bonded preslit caps (500/pk), solvent inlet filters stainless steel (4/pk), inline filter kit, multifunction tool, Stay Safe cap starter kit, and complete contents of 1260 Infinity II capillary kit (5067-6614) | 5067-6617 |
| InfinityLab convenience kit, for 1290 Infinity II LC | Includes solvent bottles 1 L (3 clear, 1 amber), identification rings and removable stickers for solvent bottles, vials (2 mL) clear with bonded preslit caps (500/pk), solvent inlet filters stainless steel (4/pk), inline filter kit, multifunction tool, Stay Safe cap starter kit, and complete contents of 1290 Infinity II capillary kit (5067-6615) | 5067-6616 |
| InfinityLab convenience kit, for 1260 Infinity II Bio-inert LC | Includes solvent bottles 1 L (3 clear, 1 amber), identification rings and removable stickers for solvent bottles, vials (2 mL) clear with bonded preslit caps (500/pk), solvent inlet filters glass (20 µm), multifunction tool, Stay Safe cap starter kit, and complete contents of 1260 Infinity II bio-inert capillary kit (5067-6621) | 5067-6620 |
| Capillary Kits | | |
| InfinityLab capillary kit, 0.17 mm, for 1260 Infinity II LC | Complete set of system capillaries, Quick Connect and Quick Turn fittings, PEEK finger-tight fittings, stainless steel restriction capillary, and blank nut | 5067-6614 |
| InfinityLab capillary kit, 0.12 mm, for 1290 Infinity II LC | Complete set of system capillaries, Quick Connect and Quick Turn fittings, PEEK finger-tight fittings, stainless steel restriction capillary, and blank nut | 5067-6615 |
| InfinityLab capillary kit, for 1260 Infinity II Bio-inert LC | Complete set of system capillaries, including Quick Connect fitting and UHP-FF fittings, PEEK finger-tight fittings, PEEK union, mounting tool for UHP-FF fittings, and blank nut | 5067-6621 |



A selection of supplies from the InfinityLab capillary kit, 0.12 mm, for 1290 Infinity II LC



Preventive maintenance kit, for 1220 manual injector systems, G4280-68750



Preventive Maintenance Kits

Noisy baselines. Shorter column life. Lower analytical sensitivity. Variable retention times. Any — or all — of these problems can be caused by a lack of preventive maintenance. That's why it's critical to set up an LC instrument maintenance program, and to keep essential supplies in stock for regular replacement of worn or damaged components. You can keep LC pumps, autosamplers, and detectors operating at their best with Agilent preventive maintenance kits. These kits contain the seals, frits, stators, fittings, connections, and other components needed to maximize LC instrument uptime. As well as complete instructions on how to access parts for cleaning or replacement.

Pump Kits

Regular pump maintenance helps to lower operating costs and generate reliable results that you can trust.

You can count on Agilent isocratic, binary, quaternary, capillary, and preparative pumps for superior flow and composition stability. And by following a regular maintenance routine, you can also count on maximum uptime and a steady, accurate solvent flow for the life of the pump.

Routine Pump Maintenance Procedures

- Replace the seals and pistons
- Replace the PTFE frit
- Replace the cartridge in the active inlet valve
- Clean the outlet ball valve
- Clean or replace the solvent inlet frits

Routine pump maintenance should be done on a regular basis to keep your Agilent LC performing at its optimum. You can perform all maintenance procedures at once or as needed. Some parts may need to be replaced more than others depending upon your application and solvent preparation procedures.



Routine Pump Maintenance Procedures

| Symptom | Cause | Solution |
|--|------------------------------------|---|
| Solvent dripping out of waste outlet when valve closed | Leak on pump head | Exchange the purge valve frit or the purge valve |
| Pressure ripple unstable | Dirty active inlet valve cartridge | Run leak test for verification and exchange the active inlet valve cartridge |
| | Leak on pump head | Run leak test for verification and exchange the outlet ball valve sieve or the complete valve |
| Gradient performance problems, intermittent pressure fluctuations | Solvent filter is blocked | Change the solvent filter |
| A pressure drop of > 10 bar across the frit (5 mL/min H ₂ O with purge valve open) indicates blockage | Dirty frit | Exchange the purge valve frit or the purge valve |
| Leaks at lower pump head side | High seal wear | Run leak test for verification and exchange the pump seals |
| Unstable retention time | | |
| Pressure ripple unstable | | |
| Seal lifetime shorter than normally expected | Scratch on plunger | Check plungers while changing the seals |
| Loss of wash solvent | Leaky wash seals | Exchange the wash seals |

Pump Kits

| Description | Kit Contents | Part No. |
|---|---|-------------|
| Starter Kits | | |
| Pump start-up kit (400 bar) | Includes outlet cap, PTFE frits (5/pk), piston seals (4/pk), outlet gold seal, 20 µm glass solvent inlet filters (2/pk), cartridge for active inlet valve | G1311-68710 |
| Preventive Maintenance Kits | | |
| Extended preventive maintenance kit, for 1100/1050/1200 pumps | Includes piston seals (2/pk), PTFE frits (5/pk), cartridge active inlet valve, outlet ball valve, pistons (2/pk) | 5065-4499 |
| Preventive maintenance kit, for 1100/1200/1120 isocratic or quaternary pumps (400 bar) | Includes piston seals (2/pk), PTFE frits (5/pk), seal caps (2/pk) | G1310-68730 |
| Preventive maintenance kit, for 1260 Infinity LC isocratic or quaternary and 1220 pumps (600 bar) | Includes PTFE pump seals (2/pk), PTFE frits (5/pk), seal caps (2/pk), film washers (2/pk) | G1310-68741 |
| Preventive maintenance kit, for bio-inert quaternary pump (600 bar) | Includes bio-inert piston seal, PTFE frits (5/pk), seal cap assembly, film washer, peristaltic pump, silicone tubing, bio-inert wash seal | G5611-68741 |



Seal cap, 5067-4728

(Continued)



Pump start-up kit, G1311-68710



Piston seals, 5063-6589



PTFE frits, 01018-22707

Pump Kits

| Description | Kit Contents | Part No. |
|---|---|-------------|
| Preventive maintenance kit, for 1100/1200 binary pump (400 bar) | Includes PTFE pump seals (4/pk), seal caps (3/pk), PTFE frits (5/pk), film washers (4/pk) | G1312-68730 |
| Preventive maintenance kit, for 1260 Infinity LC binary pump (600 bar) | Includes PTFE pump seals (4/pk), seal caps (3/pk), PTFE frits (5/pk), film washers (4/pk) | G1312-68741 |
| Preventive maintenance kit, for 1100/1200 and 1260 Infinity LC preparative pump | Includes filter cup, seal prep flange (4/pk), filter assembly, peristaltic pump | G1361-68710 |
| Preventive maintenance kit, for G1376A capillary pump | Includes pump seals (4/pk), stainless steel frit, seal cap assembly (4/pk) | G1376-68710 |
| Preventive maintenance kit, for 1290 Infinity binary pumps* | Includes polyethylene pump seals (4/pk), PTFE frits (5/pk), seal cap assembly (4/pk) | G4220-68741 |
| Seal wash preventive maintenance kit, for 1290 Infinity binary pumps* | Includes polyethylene wash seals (4/pk), film washers (4/pk), peristaltic pump | G4220-68742 |
| Preventive maintenance kit, for 1290 Infinity quaternary pumps* | Includes polyethylene pump seals (2/pk), frit assembly, seal cap assembly, frit for inline filter, 0.3 µm (5/pk) | G4204-68741 |
| Seal wash preventive maintenance kit, for 1290 Infinity quaternary pumps* | Includes polyethylene wash seals (2/pk), film washers (2/pk), peristaltic pump | G4204-68742 |
| Preventive maintenance kit, for 1260 Infinity II flexible pump and 1290 Infinity II flexible pump with Long Life or Easy Maintenance pump heads | Including polyethylene pump seals (2/pk), wash seals (2/pk), peristaltic pump, inline filter frit (5/pk), frit assembly for outlet filter | G7104-68741 |
| Preventive maintenance kit, for 1290 Infinity II binary pumps with Long Life and Easy Maintenance pump heads | Includes polyethylene pump seals (4/pk), wash seals (4/pk), seal cap assembly (2/pk), frit assembly, PTFE frits | G7120-68741 |

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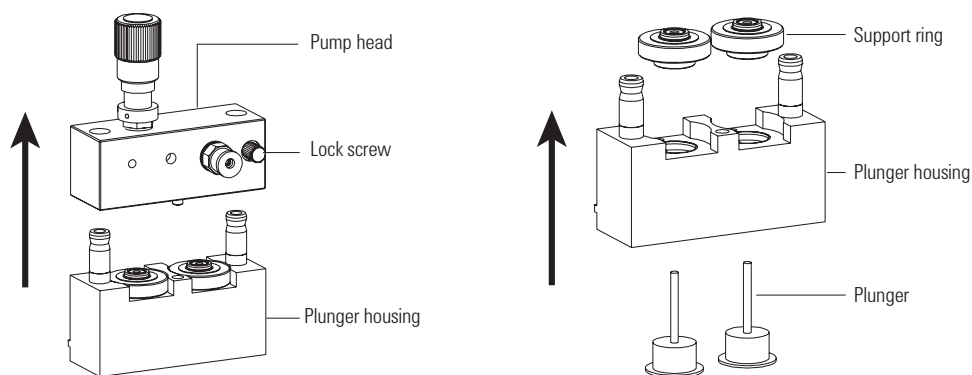
Pump Kits

| Description | Kit Contents | Part No. |
|--|---|-------------|
| Instrument Tool Kits | | |
| 1290 Infinity II LC tool kit | Includes hex key set, seal insert tool, hex driver slitted (3/pk), wrenches, plastic syringe, syringe adapter, blanking nut | G7120-68708 |
| Compact tool kit | Includes tool for 1/8 nut, seal insert tool, wrench 0.25 inch to 0.31 inch, open wrench 14 mm, hex key (2.5 mm, 4 mm), 9/64 inch, wrench 0.50 inch to 0.56 inch | G4296-68715 |
| 1290 Infinity pump service kit | Includes pump seal exchange tool, torque wrench, hex bit (2.5 mm, 4 mm), 19 mm open wrench, torx bit 10 x 25 mm, adapter 0.25 inch square to hex | 5067-4699 |
| 1290 Infinity pump service kit, for pumps with Long Life and Easy Maintenance pump heads | Includes torque wrench, torx bit 10 x 25 mm, adapter 0.25 inch square to hex, pump head holder, seal handling device, wrench 0.25 inch to 0.31 inch, abrasive paper | 5067-6652 |
| Active seal wash kit | Includes 2 wash seal gaskets, 2 pump seals, peristaltic pump (includes pump cassette and motor), 2 seal keepers, 2 support ring assemblies, seal insert tool, silicone tubing | G1311-68711 |

*Tool kit 5067-4699 required for servicing 1290 Infinity pump heads (except pumps equipped with Long Life or Easy Maintenance pump heads)



Compact tool kit, G4296-68715

TIPS & TOOLS

Information on maintenance procedures can be found at www.agilent.com/chem/LCmaintenancenotes

Autosampler Kits



Autosampler Maintenance Schedule

| Procedure | When to Perform | Time Required |
|--------------------------------|--|---------------|
| Exchanging the needle assembly | When needle shows indication of damage or blockage | 15 minutes |
| Exchanging the seat assembly | When the seat shows indication of damage or blockage | 10 minutes |
| Exchanging the metering seal | When autosampler reproducibility indicates seal wear | 30 minutes |



Start-up kit, for G1313A, G1329A samplers,
G1313-68709

Autosampler Kits

| Description | Kit Contents | Part No. |
|--|---|-------------|
| Starter Kits | | |
| Start-up kit for G1313A, G1329A autosamplers | Includes Vespel rotor seal, needle seat, needle, metering seals (2/pk) and finger caps (15/pk) | G1313-68709 |
| Preventive Maintenance Kits | | |
| For G1313A, G1329A samplers | Includes Vespel rotor seal, needle seat, needle | G1313-68730 |
| Extended kit for G1313A, G1329A autosamplers | Includes Vespel rotor seal, needle seat, needle, isolation seal, stator face | 5065-4498 |
| For G1329B autosampler | Includes PEEK rotor seal, needle, seat assembly, seal for metering piston | G1313-68719 |
| For G1367A/B autosamplers | Includes needle assembly, needle seat, peristaltic pump, Vespel rotor seal, seal-tight nut (loop fitting) | G1367-68730 |
| For G1367C/D sampler | Includes needle assembly, needle seat, peristaltic pump, PEEK rotor seal, seal-tight nut (loop fitting) | G1367-68734 |
| For G1367E autosampler | Includes needle assembly, needle seat, peristaltic pump, PEEK rotor seal | G1367-68741 |

(Continued)

Autosampler Kits

| Description | Kit Contents | Part No. |
|---|--|-----------------|
| For G4277A/ G4278A/G4270- CTC/G4271-CTC (all PAL) samplers | Includes tension cord for injection unit, needle seal and lubrication kit | G6500-88088 |
| For G4226A sampler | Includes needle assembly, needle seat, peristaltic pump, Vespel rotor seal | G4226-68735 |
| For G7129A vialsampler | Includes needle assembly, needle seat assembly, PEEK rotor seal, finger caps (15/pk) | G7129-68740 |
| For G7129B vialsampler | Includes needle assembly, needle seat assembly, Vespel rotor seal, finger caps (15/pk) | G7129-68730 |
| For G7167B multisampler standard | Includes needle assembly, high pressure needle seat, PEEK rotor seal | G7167-68710 |
| For G7167B multisampler dual needle | Includes needle assembly (2/pk), high pressure needle seat (2/pk), PEEK rotor seal, rotor seal injection valve | G7167-68720 |
| For G7167A multisampler standard | Includes needle assembly, high pressure needle seat, PEEK rotor seal | G7167-68730 |
| For G5668A bio- inert multisampler | Includes needle assembly, high pressure needle seat, PEEK rotor seal | G5668-68730 |



1260 Infinity multisampler with multiwash open,
G7167A

Detector Maintenance Kits



Detector Maintenance Tips

| Symptom | What To Do | Additional Information |
|--|---|--|
| Lamp does not ignite | Exchange the lamp | Perform a wavelength calibration test and an intensity test after lamp replacement |
| Noise exceeds application limit | Check lamp and flow cell. Maintain or exchange the flow cell. Replace lamp. | Perform a wavelength calibration test after replacement |
| Drift exceeds application limit | Exchange the lamp | Perform a wavelength calibration test and an intensity test after lamp replacement |
| Leaky flow cell (For G4212/G7117) | Exchange the flow cell | Perform a wavelength calibration test after flow cell replacement |
| Leaky flow cell (For G1314/G1315/G1365/ G7114/G7115/G7165) | Clean, replace parts or exchange the flow cell | Perform a wavelength calibration test after flow cell replacement |
| Lower intensity (For G4212/G7117) | Flush or exchange the flow cell | Perform a wavelength calibration test after flow cell replacement |
| Lower intensity (For G1314/G1315/G1365/ G7114/G7115/G7165) | Clean, replace parts or exchange the flow cell | Perform a wavelength calibration test after flow cell replacement |



Detector Maintenance Kits

| Description | Kit Contents | Part No. |
|--|--|-------------|
| Variable Wavelength Detector (VWD) | | |
| High-pressure flow cell kit | Includes windows (2/pk), Kapton gaskets (2/pk), PEEK rings (2/pk) | G1314-65054 |
| Micro flow cell kit | Includes windows (2/pk), gaskets #1 (2/pk), gaskets #2 (2/pk) | G1314-65052 |
| Semimicro flow cell kit | Includes windows (2/pk), gaskets: standard #1 (2/pk), semi-micro #1, semi-micro #2 | G1314-65056 |
| Standard flow cell kit (flow cell G1314-60080) | Includes windows (2/pk), gaskets #1 (2/pk), gaskets #2 (2/pk) | G1314-65050 |
| Standard flow cell kit (flow cells G1314-60086, G1314-60186) | Includes windows (2/pk), gaskets #1 (2/pk), gaskets #2 (2/pk) | G1314-65061 |
| Cell screw kit | Includes window holders assembled with windows and washers (2/pk) | 79883-68703 |
| Cell screws | | G1314-65062 |

(Continued)



Detector Maintenance Kits

| Description | Kit Contents | Part No. |
|---|--|-----------------|
| Diode Array Detector (DAD)/Multiple Wavelength Detector (MWD) | | |
| Inline pressure relief valve kit, for G4220A, G4220B | Includes pressure relief valve, fittings, tubing, and instructions. | G4212-68001 |
| Cell repair kit, for standard cell For G1315A/B, G1365A/B, G1315C/D, G1365C/D, G7115A | Includes window screw kit, 4 mm hexagonal wrench, seal kit | G1315-68712 |
| Cell repair kit, semimicro cell For G1315A/B, G1365A/B, G1315C/D, G1365C/D, G7115A | Includes window screw kit, 4 mm hexagonal wrench, seal kits | G1315-68713 |
| High-pressure cell repair kit For G1315A/B, G1365A/B, G1315C/D, G1365C/D, G7115A | Includes quartz window, spring washers (5/pk), seal rings (2/pk) | 79883-68700 |
| Sealing kit, for 500 nL flow cell | Includes torque adapter, cell seal assembly (2/pk), LiteTouch front and back ferrules (5/pk) | G1315-68715 |
| Sealing kit, for 80 nL flow cell | Includes torque adapter, cell seal assembly (2/pk), LiteTouch front and back ferrules (5/pk), sleeves for 360 µm od capillaries (5/pk) | G1315-68725 |
| Standard cell repair kit, 1050/1090 | Includes gaskets (12/pk), window holders assembled with windows and washers (2/pk), cell screws (2/pk), washers (10/pk), hex key | 79883-68701 |



Legacy System Kits

Stay-Fit Kits for 1100 Series Systems

| Description | Kit Contents | Part No. |
|---|---|-------------|
| 1100 Quat/ALS Stay-Fit maintenance pack | Piston seals (2/pk), PTFE frits (5/pk), seal caps (2/pk), rotor seal (Vespel), ALS needle, ALS seat capillary, glass filter solvent inlet (4/pk), frit adapter solvent inlet (4/pk) | 01100-68000 |
| 1100 Quat/ALS/VWD Stay-Fit maintenance pack | Piston seals (2/pk), PTFE frits (5/pk), seal caps (2/pk), rotor seal (Vespel), ALS needle, ALS seat capillary, glass filter solvent inlet (4/pk), frit adapter solvent inlet (4/pk), D2 Lamp | 01100-68001 |
| 1100 Bin/ALS Stay-Fit maintenance pack | Piston seals (4/pk), PTFE frits (5/pk), seal caps (3/pk), rotor seal (Vespel), sieves for outlet valve, ALS needle, ALS seat capillary, glass filter solvent inlet (4/pk), frit adapter solvent inlet (4/pk) | 01100-68002 |
| 1100 Bin/ALS/DAD Stay-Fit maintenance pack | Piston seals (4/pk), PTFE frits (5/pk), seal caps (3/pk), sieves for outlet valve, rotor seal (Vespel), ALS needle, ALS seat capillary, glass filter solvent inlet (4/pk), frit adapter solvent inlet (4/pk), long-life deuterium lamp | 01100-68003 |
| 1100 Quat/WPS Stay-Fit maintenance pack | Piston seals (2/pk), PTFE frits (5/pk), seal caps (2/pk), rotor seal (Vespel), WPS needle, WPS seat capillary, peristaltic pump, nut seal tight fitting for loop capillary, glass filter solvent inlet (4/pk), frit adapter solvent inlet (4/pk) | 01100-68004 |
| 1100 Quat/WPS/VWD Stay-Fit maintenance pack | Piston seals (2/pk), PTFE frits (5/pk), seal caps (2/pk), rotor seal (Vespel), WPS needle, WPS seat capillary, peristaltic pump, nut seal tight fitting for loop capillary, glass filter solvent inlet (4/pk), frit adapter solvent inlet (4/pk), D2 lamp | 01100-68005 |
| 1100 Bin/WPS Stay-Fit maintenance pack | Piston seals (4/pk), PTFE frits (5/pk), seal caps (3/pk), sieves for outlet valve, rotor seal (Vespel), WPS needle, WPS seat capillary, peristaltic pump, nut seal tight fitting for loop capillary, glass filter solvent inlet (4/pk), frit adapter solvent inlet (4/pk), D2 lamp | 01100-68006 |
| 1100 Bin/WPS/DAD Stay-Fit maintenance pack | Piston seals (4/pk), PTFE frits (5/pk), seal caps (3/pk), sieves for outlet valve, rotor seal (Vespel), WPS needle, WPS seat capillary, peristaltic pump, nut seal tight fitting for loop capillary, glass filter solvent inlet (4/pk), frit adapter solvent inlet (4/pk), long-life deuterium lamp | 01100-68007 |

Preventive Maintenance Kits for 1120/1220 Series Systems

| Description | Kit Contents | Part No. |
|--|---|-------------|
| Preventive maintenance kit, for 1220 Infinity LC, automated injector systems | Includes piston seals (2/pk), PTFE frits (5/pk), Vespel rotor seal, needle, needle seat, seal cap assembly (2/pk) | G4280-68730 |
| Preventive maintenance kit, for 1120 manual injector systems | Includes piston seals (2/pk), PTFE frits (5/pk), PEEK rotor seal, seal cap assembly (2/pk) | G4280-68710 |
| Preventive maintenance kit, for 1220 automated injector systems | Includes piston seals (2/pk), PTFE frits, rotor seal, seal cap assembly (2/pk), needle, and needle seat | G4280-68770 |
| Preventive maintenance kit, for 1220 manual injector systems | Includes piston seals (2/pk), PTFE frits, rotor seal, seal cap assembly (2/pk) | G4280-68750 |

PUMP SUPPLIES

Agilent pumps feature superior stability and composition precision. LC pumps include isocratic, binary, quaternary, capillary, and preparative; all key components can be accessed by simply removing the front cover.

Agilent quality parts are designed, tested, and manufactured with the same attention to detail you expect from Agilent instruments.

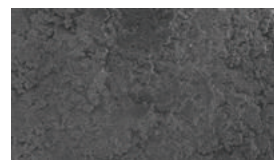
That means your LC or LC/MS system will deliver superior qualitative and quantitative results and consistent reproducibility and reliability.

Purge Valves

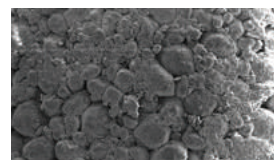
PTFE frits

The PTFE frit is a crucial part in the flow path that prevents particulates and microbes from getting into the system. It is important that frits maintain their shape up to the pressure limit of the system, since collapse or abrasion of the frit can release PTFE particles, resulting in blockage or loss of analysis efficiency.

Scanning electron microscopy (SEM) inspection reveals that sizes of PTFE particles in Agilent frits are much more uniform than frits from other vendors. If the frit is abraded, particles that are too large can block the flow path, while particles too small can pass through the column inlet frit, getting into the column, or even reach the detector causing contamination of the flow cell. In contrast to alternative frits, Agilent frits are designed to have a defined particle size to avoid these issues.



Agilent



Other vendor

Scanning electron microscope (SEM) image showing the superior uniformity of Agilent frits



Purge valve long with PTFE frit (600 bar),
G1312-60071



Purge valve short with PTFE frit (600 bar),
G7111-60061



PTFE frits, 01018-22707

Purge Valves

| Description | Comments | Part No. |
|---|--|-------------|
| Manual Purge Valves | | |
| Purge valve, long, with PTFE Frit, 600 bar | For pumps G1310A/B, G1311A/B/C, G1312A/B/C, G1376A, G2226A, G7111A/B, G7112B, G4302A, G4782A | G1312-60071 |
| Purge valve, short, with PTFE Frit, 600 bar | For 1120/1220 Series pumps | G7111-60061 |
| Bio-inert purge valve, long | 1260 Infinity Bio-inert quaternary pump (G5611A) | G5611-60062 |
| Bio-inert purge valve, short | 1260 Infinity II Bio-inert quaternary pump (G5654A) | G5611-60064 |
| PTFE frits, 5/pk | For 1290 Infinity binary pumps (G4220A/B) and all 1260 Infinity/1200 Series/1100 Series and analytical pumps | 01018-22707 |
| Seal cap | For all manual purge valves | 5067-4728 |
| Automated Purge Valves | | |
| Rotor seal (Vespe), 1200 bar | For G4220A/B | 5068-0005 |
| Stator head, 1200 bar/1300 bar | For G4220A/B, G7120A | 5068-0004 |
| Purge valve head, 1300 bar | For G7120A | 5067-4236 |
| Rotor seal (PEEK), 1300 bar | For G7120A | 5068-0201 |
| Rotor, for multipurpose valve head, 1200 bar | For G4204A | 5068-0123 |
| Stator, for multipurpose valve, 1200 bar / 1300 bar | For G4204A, G7104A/C | 5068-0001 |
| Rotor, for multipurpose valve head, 1300 bar | For G7104A | 5068-0202 |
| Rotor, for 8 position/9 port purge valve, 800 bar | For G7104C | 5068-0299 |

TIPS & TOOLS

Information on maintenance procedures can be found at
www.agilent.com/chem/LCmaintenancenotes

Inlet and Outlet Valves

Inlet Valves

| Description | Comments | Part No. |
|--|---|--------------|
| Active Inlet Valves | | |
| Seal cap | For all manual purge valves | 5067-4728 |
| Active inlet valve, without cartridge | For G1310A, G1311A/B/C, G1312A/B/C, G7111A/B, G1376A, G2226A | G1312-60025 |
| Cartridge, for active inlet valve, 400 bar | For G1310A, G1311A/C, G1312A/C, G1376A, G2226A | 5062-8562 |
| Cartridge, for active inlet valve, 600 bar | For G1310B, G1311B, G1312B, G7111A/B, G7112B | G1312-60020 |
| Bio-inert active inlet valve | For G5611A, G5654A | G5611-60025 |
| Bio-inert cartridge, for active inlet valve, 600 bar | For G5611A, G5654A | G5611-60020 |
| Passive Inlet Valves | | |
| Passive inlet valve, 600 bar | For G1310B, G1311B, G1311C, G7111A/B, G7112B, 1120/1220, G4302/G4782A (channel B) | G1312-60066* |
| Passive inlet valve, 800/1200/1300 bar | For G4204A, G7104A/C | G4204-60022* |
| Passive inlet valve, 1200/1300 bar | For G4220A/B, G7120A | G4220-60022* |
| 1260 Infinity LC inlet valve, type N | For normal phase applications. Used with G1310A, G1311A/B/C, G1312A/B/C, G7111A/B, G7112B, G1376A, G2226A | G1312-60166* |
| Passive inlet valve, Type N, 1300 bar | For normal phase applications. Used with 1290 Infinity binary pumps and 1290 Infinity II high speed pumps | G4220-60122* |
| Passive inlet valve replacement kit | For 1120/1220 | G4280-60500* |
| Inlet valve for SFC pump | For G4302A, G4782A (channel A) | G4302-60066* |
| Valve assemblies (inlet/outlet), for preparative pumps | For G1361A | G1361-60012 |

*Inlet valve with integrated seal



Seal cap, 5067-4728



Cartridge, 400 bar, 5062-8562



AIV cartridge, 600 bar, G1312-60020



Passive inlet valve, G1312-60066



Outlet valve, G1312-60067



Outlet valve, G4220-60028



Valve assemblies, G1361-60012

Outlet Valves

| Description | Comments | Part No. |
|---|---|--------------|
| Outlet valve, 600 bar | For G1310A/B, G1311A/B/C, G1312A/B/C, G1376A, G2226A, G7111A/B, G7112B, 1120/1220, G4302/G4782A (channel B) | G1312-60067* |
| Outlet valve, Type N, 600 bar | For normal phase applications. Used with G1310A, G1311A/B/C, G1312A/B/C, G7111A/B, G7112B, G1376A, G2226A, G4302/G4782A (channel A) | G1312-60167* |
| Outlet valve 1200/1300 bar | For G4204A, G4220A/B, G7104A/C, G7120A | G4220-60028* |
| Outlet valve, type N, 1300 bar | For normal phase applications. Used with G4204A, G4220A/B, G7104A/C, G7120A | G4220-60128* |
| Internal gold seal, for 1290 outlet valve | Internal gold seal for G4220-60028, G4220-60128 | G4220-20020 |
| Bio-inert outlet valve, 600 bar | For G5611A, G5654A | G5611-60067* |
| Stainless steel sieve | For G1312-60012 valve (valve replaced by G1312-60067) | 5063-6505 |
| Valve assemblies (inlet/outlet), for prep pumps | For G1361A | G1361-60012 |

*Outlet valve with integrated seal

Enhance traceability and simplify documentation

InfinityLab Poroshell 120 columns with Column ID make it easy to document columns and conditions for routine analysis.

Benefits include:

- **Usability**—find column details easily
- **Traceability**—know exactly which column is/was installed
- **Security**—avoid running methods incompatible with the column

Turn to **Page 128** to find out more.



Pistons and Piston Seals

Agilent pistons are made from a high purity, monocrystalline sapphire for maximum durability.

Agilent sapphire pistons are:

- Meticulously cut at just the right angle, making them durable — and long lasting
- Precisely aligned in their stainless steel holder to minimize wear on the piston and seal

Agilent seals are designed to fit snugly around our pistons, and are capable of adapting to a wide range of flow rates and pressures.

Agilent piston seals are:

- Spring-loaded and engineered to deliver optimal performance over highly dynamic flow and pressure ranges
- Manufactured from a proprietary polymer blend, and feature a spring made from the same high-quality stainless steel that is used in our pump's flow path

The combination of our piston and seal has undergone extensive testing under temperature stress, with all common HPLC solvents, and in many instruments. More importantly, they yield consistent, reproducible results.

Pistons

| Description | Comments | Part No. |
|---|---|-------------|
| Sapphire piston (standard base size) | For G1310A/B/C, G1311A/B/C, G1312A/B/C, G7112B, G1376A, G2226A, 1120/1220 | 5063-6586 |
| Wash pump piston assembly | For G4309A | G4301-60130 |
| Ceramic piston | For G4204A, G4220A/B | 5067-5678 |
| Ceramic piston (Easy Maintenance pump head) | For G4204A, G4220A/B if equipped with Easy Maintenance pump heads | 5067-5938 |
| Ceramic piston (Long Life pump head) | Standard for G7104A/C, G7120A For G4204A, G4220A/B if equipped with Long Life pump heads | 5067-5975 |
| Sapphire piston (preparative) | For G1361A | G1361-22402 |
| Sapphire piston (slim base) | For G5611A, G4302A, G4782, G4226A, G1376A | 5067-4695 |
| Piston SFC booster | For G4301A | G4301-20201 |



Ceramic piston (Long Life pump head), 5067-5975



Sapphire piston (preparative), G1361-22402



Piston seals (reversed phase), 5063-6589

Piston Seals

| Description | Comments | Part No. |
|---|---|-------------|
| Piston seal, PTFE, 2/pk (reversed-phase) | For G1310A/B/C, G1311A/B/C, G1312A/B/C, G7112B, G1376A, G2226A, 1120/1220 | 5063-6589 |
| Piston seal, PE, 2/pk (normal phase) | For G1310A/B/C, G1311A/B/C, G1312A/B/C, G7112B, G1376A, G2226A, 1120/1220 | 0905-1420 |
| Bio-inert piston seal | For G5611A, G5654A | G5611-21503 |
| Pump seal, PE, for 1290 Infinity LC (normal and reversed-phase) | For G4204A, G4220A/B, G7104A/C, G7120A | 0905-1719 |
| Seal prep flange | For G1361A | 5022-2188 |
| O-ring | For G1361A | 0905-1516 |



Seal Wash

The routine use of highly concentrated buffer solutions (100 mM) will reduce the life of seals and pistons in your pump. Counteract the problem with one of Agilent's seal wash kits, which flush the back of the seal with a wash solvent.

Note: Water/isopropanol (90:10 v/v) is recommended as the wash solvent.

Seal Wash

| Description | Comments | Part No. |
|--|--|-----------|
| Seal Wash Pumps | | |
| Peristaltic pump, with PharMed tubing, includes spring coils and tube adapters | Standard for 1100/1200/1200 RRLC, Infinity and Infinity II LC pumps, and autosamplers with needle wash | 5065-4445 |
| Peristaltic pump, with silicone tubing | For 1100/1200/1200 RRLC, Infinity and Infinity II LC pumps | 5042-8507 |
| Peristaltic pump, with ChemSure tubing | For 1100/1200/1200 RRLC, Infinity and Infinity II LC pumps | 5065-9952 |

(Continued)



Peristaltic pump, 5042-8507



Peristaltic pump with ChemSure tubing, 5065-9952

Seal Wash

| Description | Comments | Part No. |
|-----------------|--------------------------------|-----------|
| ChemSure tubing | Replacement tube for 5065-9952 | 5042-8954 |

Wash Seals

| | | |
|---|--|-----------|
| Wash seal, PTFE (reversed-phase) | For 1260 Infinity and Infinity II pumps, 1290 Infinity and Infinity II pumps (with Easy Maintenance or Long Life pump heads only), 1100/1200 pumps | 0905-1175 |
| Wash seal, polyethylene, for 1290 Infinity LC | For 1260 Infinity and Infinity II pumps, 1290 Infinity and Infinity II pumps (with classical pump heads only), 1100/1200 series pumps (optional for normal phase applications) | 0905-1718 |
| Wash seal, bio-inert | For G5611A, G5654A | 0905-1731 |

Various Parts and Kits

| | | |
|---|---|-------------|
| Seal keeper | For G1310A, G1311A/C, G1312A/C, 1120 | 5001-3743 |
| Seal keeper, bio-inert | For G5611A, G5654A | G5611-26210 |
| Seal holder, ceramic | For G1312B, G1311B/C, G7111A/B, G7112B, 1220 | 5042-8952 |
| Seal wash gasket, 6/pk | For G1310B, G1311B/C, G1312B/C, G7111A/B, G7112B, G7104A/C, G7120A, 1120/1220, G4782A | 5062-2484 |
| Support ring seal wash | For G1310A, G1311A/B/C, G1312A/B/C, G7111A/B, G7112B | 01018-60027 |
| Support ring, for 1290 Infinity LC with seal wash | For G4204A, G4220A/B, G4782A | G4220-63010 |
| Silicone tubing, 1 mm id, 3 mm od, 5 m | Tubing for inter pump-head and waste connections | 5065-9978 |
| Active seal wash kit | For 1100/1200 isocratic or quaternary pumps | G1311-68711 |
| Active seal wash kit | For G1312A/B/C | G1312-68711 |
| Bio-inert wash seal | For G5611A, G5654A | 0905-1731 |
| Continuous seal wash kit | For 1100/1200/1200 RRLC pumps | 01018-68722 |
| Wash pump seal kit | For 1260 Infinity SFC | G4301-60140 |

TIPS & TOOLS

Information on maintenance procedures can be found at www.agilent.com/chem/LCmaintenancenotes



Solvent mixer, 5067-1565



Infinity LC inline filter, 5067-6189

InfinityLab solvent cabinet, with solvent bottles
and Stay Safe caps

Filters and Mixers

| Description | Comments | Part No. |
|--|--|-------------|
| Solvent mixer, 1100 Series | For G1312A/B/C, G7112B | G1312-87330 |
| Solvent mixer, short, 200 μ L | For G1312A/B/C, G7112B | 5067-1565 |
| Jet weaver, 35 μ L/100 μ L, for binary pumps | For G4220A, G4220B | G4220-60006 |
| Jet weaver, 380 μ L, for binary pumps | For G4220A, G4220B | G4220-60012 |
| Jet weaver mixer kit, 35 μ L, for quaternary and flexible pumps | For G4204A, G7104A, G7104C Includes connection capillaries | G4204-68035 |
| Jet weaver mixer kit, 100 μ L, for quaternary and flexible pumps | For G4204A, G7104A, G7104C Includes connection capillaries | G4204-68100 |
| Jet weaver mixer kit, 380 μ L, for quaternary and flexible pumps | For G4204A, G7104A, G7104C Includes connection capillaries | G4204-68380 |
| Combo mixer assembly | For G7120A | G4220-60027 |
| Inline filter, 0.3 μ m, for 1290 Infinity II LC systems | Inline filter, with replaceable filter frits, comes with stainless steel cartridge, flexible capillary, and rigid connection capillary | 5067-6189 |
| Filter frits, 0.3 μ m, 5/pk | Replacement filter frits, for 5067-6189 | 5023-0271 |
| Stainless steel filter assembly, with PEEK ring, 2 μ m pore size | For G1361A | 5022-2192 |

Agilent Captiva Premium Syringe Filters

Protect your samples and your results

Even small amounts of particulate can clog your column inlet, causing high column backpressure, retention-time shift, resolution loss, and shorter column life. Agilent Captiva Premium Syringe Filters—developed by chromatographers—remove damaging particulates for optimal performance, column lifetime, and sample integrity.

To order, visit www.chem.agilent.com/store



Supplies for the SFC Control Module (G4301A)

| Description | Comments | Part No. |
|---|---|-------------|
| Seal, SFC booster pump | For 1260 Infinity II SFC control module | G4301-20200 |
| Wash pump seal kit | For 1260 Infinity and 1260 Infinity II SFC control module | G4301-60140 |
| Wash pump piston assembly | For 1260 Infinity and 1260 Infinity II SFC control module | G4301-60130 |
| Low dispersion nozzle assembly | For 1260 Infinity II SFC control module | G4301-67501 |
| Capillary, SFC booster pump, out, rigid stainless steel | For 1260 Infinity II SFC control module | G4301-60056 |
| Booster pump seals, 2/pk | For 1260 Infinity SFC control module | G4301-60250 |

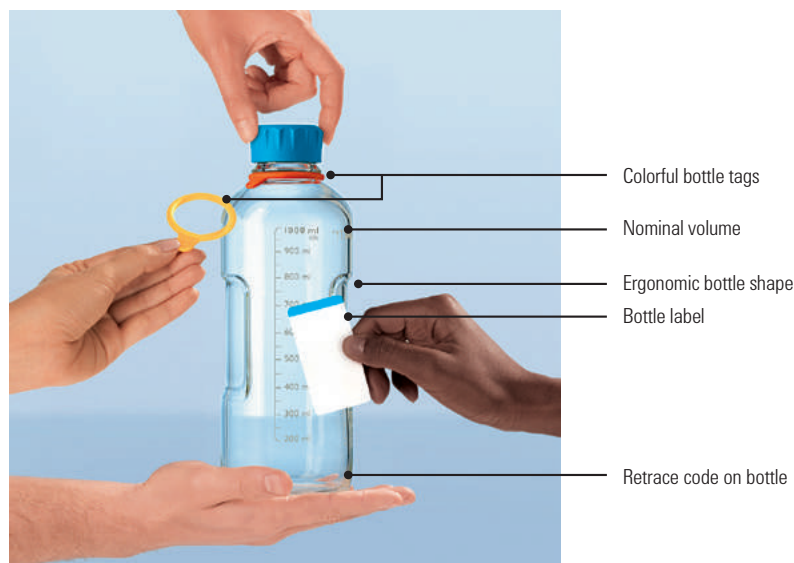
Solvent Reservoir and General Supplies**Safer laboratory solvent bottles**

Agilent's solvent bottles have been designed for easier use and safer handling, lowering the risk of accidents in the lab.

These solvent bottles feature:

- An ergonomic design, the slimmer profile and ergonomically shaped gripping zones on both sides of the bottle promote easier and safer use
- A predefined labeling area with self-adhesive labels and colorful silicone bottle tags, mean that you can clearly and unambiguously identify solvent compositions
- An easy to read durable white ceramic print layout clearly indicates the nominal volume of the bottle and allows you to quickly determine the rest contents of the bottle

These solvent bottles are compatible with any LC instrument, and can be incorporated seamlessly into your LC workflow.



1260 Infinity II SFC control module

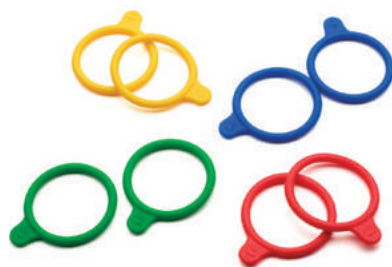




InfinityLab solvent bottle, clear, 1 L, 9301-6528



InfinityLab solvent bottle, amber, 1 L, 9301-6526

InfinityLab identification silicone rings, 8/pk,
9301-6529

Solvent Reservoir and General Supplies

| Description | Comments | Part No. |
|--|--|-------------|
| Standard bottle cap, with 3-hole insert | | 5063-6531 |
| InfinityLab solvent bottle, clear, 1 L | 93 mm diameter, 253 mm height, GL45 thread | 9301-6524 |
| InfinityLab solvent bottle, clear, 1 L, with cap | 93 mm diameter, 253 mm height, GL45 thread | 9301-6528 |
| InfinityLab solvent bottle, amber, 1 L | 93 mm diameter, 253 mm height, GL45 thread | 9301-6526 |
| InfinityLab solvent bottle, clear, 500 mL, with cap | 78 mm diameter, 195 mm height, GL45 thread | 9301-6523 |
| InfinityLab solvent bottle, amber, 500 mL, with cap | 78 mm diameter, 195 mm height, GL45 thread | 9301-6525 |
| InfinityLab solvent bottle, clear, 125 mL, with cap | GL45 thread | 9301-6527 |
| Solvent bottle, clear, 2 L, 2 inlets | GL45 thread | 5065-4421 |
| Solvent bottle, amber, 2 L | GL45 thread | 9301-6341 |
| Solvent bottle, clear, 2 L | GL45 thread | 9301-6342 |
| InfinityLab identification silicone rings, 8/pk | Four colors | 9301-6529 |
| Sticker, for solvent bottles, 100/pk | Removable | 9301-6530 |
| Bottle head tubing, ultra clean quality (recommended for MS application) | Includes set of clips for marking the various channels, and solvent tubes, 2280 mm long, with premounted fittings on one side (1/4-28), 4/pk | 5043-1789 |
| Bottle head tubing | Includes set of clips for marking the various channels, and solvent tubes, 2280 mm long, with premounted fittings on one side (1/4-28), 4/pk | 5043-1790 |
| Bottle Head Assembly | | |
| Bottle head assembly, for screw bottle | For 1100/1200/1260 series systems | G1311-60003 |
| Bottle head assembly | For 1260 Infinity II, 1290 Infinity/Infinity II LC | G7120-60007 |
| Bottle head assembly, extra long (2280 mm) | | G7122-60007 |
| Bottle head assembly, ultra clean tubing quality | Recommended for MS applications, 1290 Infinity/Infinity II LC | G7120-60017 |
| Tubing kit, ultra clean quality | Recommended for MS applications, includes bottle head assemblies (G7120-60017, 4/pk), and tubing kits, 140 mm (G4220-60070, 3/pk) | G7120-68070 |
| Tubing kit, 140 mm, 2/pk | SSV to shutoff valve or degassing unit (binary pump), degasser to MCGV (quaternary pump) | G4220-60035 |
| Tubing kit, 140 mm, 2/pk, ultra clean tubing quality | Recommended for MS applications | G4220-60070 |
| Bottle head assembly, for prep system | 4.7 mm od tubing | G1361-60022 |

Solvent Filters

Solvent inlet filters represent the first barrier for retaining particulates, precipitation, microbes from mobile phases, buffers, and salt solutions. Filters are significant in preventing system blockage, pressure increase, and contamination. Cleanliness of parts is vital for avoiding system contamination. Agilent solvent filters are packed in ultraclean antistatic bags with an inner metallic coating that does not release contaminants such as plasticizers or antioxidants. LC/MS analysis shows that filters not from Agilent, packed in normal plastic packs, can cause extra peaks during analysis. Erucamide, a common slip agent used in polyethylene films, is one such example.

Pore size

A good solvent glass filter should have a defined, homogenous pore size to effectively block particulates above a certain size, while letting mobile phases through without significant pressure increase. Too large pore size leads to deficiency of filtration, while pores that are too small can cause pressure increase, resulting in solvent pumping difficulties. Inspection of Agilent and other vendor solvent glass filters by scanning electron microscopy (SEM) shows uniform pore sizes and smooth particle surfaces in the Agilent filter. In contrast, other vendor filters had inconsistent particle and pore sizes. The small particles or particle fragments shown on the other vendor filter could be flushed into the flow path, blocking the pump frit, capillaries, valves, or columns.



Glass filter, solvent inlet, 20 µm pore size, 5041-2168



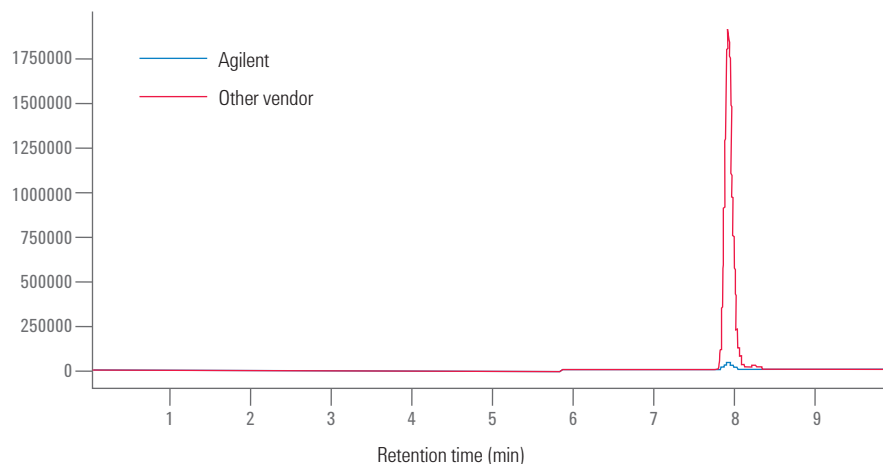
Stainless steel filter, solvent inlet, 10 µm pore size, 01018-60025



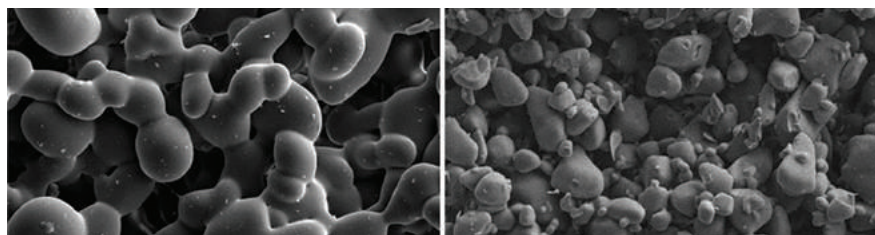
Filter frit adapters, 5062-8517

Solvent Filters

| Description | Recommended Use | Part No. | Frit Adapter | Part No. | Frit Inlet id (mm) | Tube od (mm) |
|--|---------------------------------------|-------------|---|-------------|--------------------|--------------|
| Glass filter, solvent inlet, 20 µm pore size | Analytical scale, micro scale | 5041-2168 | Frit adapter, PTFE, 3 mm, 4/pk | 5062-8517 | 5 | 3.2 |
| Stainless steel filter, solvent inlet, 10 µm pore size | For use in capillary and nano systems | 01018-60025 | No adapter required, filter goes directly into 1.5 mm id tubing | | | |
| Glass filter, solvent inlet, 40 µm pore size | Preparative LC | 3150-0944 | Frit adapter, PTFE, for 4.7 mm od tubing | G1361-23205 | 7 | 4.7 |
| Glass filter, solvent inlet, 40 µm pore size | Preparative LC | 3150-0944 | Frit adapter, PTFE, 4 mm | G1361-23204 | 7 | 4 |
| Glass filter, solvent inlet, 40 µm pore size | For G2258A dual loop autosampler | 3150-0944 | Frit adapter, PTFE, for 3.2 mm od tubing | G2258-23201 | 7 | 3.2 |



Non-Agilent filters packed in normal plastic packs can cause extra peaks during analysis



Agilent

Other vendor

Scanning electron microscope (SEM) image of solvent inlet glass filter from Agilent and another vendor, showing the superior pore-size homogeneity of the Agilent product.



CLEANING THE SOLVENT FILTER

If the filter is in good condition, the solvent will freely drip out of the solvent tube (hydrostatic pressure). If the solvent filter is partially blocked, only very little solvent will drip out of the solvent tube.

Caution: Small particles can permanently block the capillaries and valves of the module.

- Always filter solvents
- Never use the module without solvent inlet filter

InfinityLab Stay Safe Caps

Open or partially covered solvent bottles can lead to the evaporation of solvents and harmful solvent vapors. Agilent InfinityLab Stay Safe caps stop solvents from leaching into the air.

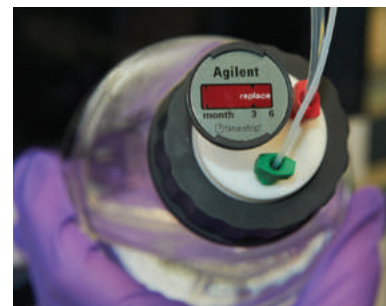
Over time, solvent composition can change, affecting your chromatographic results. Storing solvents with airtight Stay Safe caps prevents this problem, ensuring the long-term consistency of your mobile phase for more reproducible results.

Stay Safe caps include an easy-to-see time strip (time based indicator) that tells you when the venting valve and charcoal filter needs to be replaced. We recommend changing the venting valve and charcoal filter after six months of use under the following conditions:

- 1 mL/min
- 8 hours per day
- 5 days per week
- Under typical lab conditions at 20 °C

Agilent InfinityLab Stay Safe caps have a GL45 thread, and install easily like standard caps and are compatible with Agilent solvent bottles.

Note: Various conditions can lead to an earlier saturation of the charcoal filter



TIPS & TOOLS

To learn more about the effectiveness of Stay Safe caps, search for the technical note 5991-7755EN, at www.agilent.com/search



5043-1217



5043-1218



5043-1219



5043-1220



Stay Safe cap kit, 5043-1222

InfinityLab Stay Safe Caps

| Description | Ports | | | | Part No. |
|--|--|------|--------|-------|-----------|
| | Fittings | Vent | Filter | Waste | |
| Stay Safe Caps | | | | | |
| GL45 with 1 port 1 vent valve with time strip (5043-1190) | 1 x 3.2 mm | 1 | | | 5043-1217 |
| GL45 with 2 ports 1 vent valve with time strip (5043-1190) | 2 x 3.2 mm | 1 | | | 5043-1218 |
| GL45 with 3 ports 1 vent valve with time strip (5043-1190) | 3 x 3.2 mm | 1 | | | 5043-1219 |
| GL45 with 4 ports 1 leak hose | 4 (2 x 3.2 mm, 1 x 2.3 mm, 1 x 1.6 mm) | | 1 | 1 | 5043-1220 |
| Kits | | | | | |
| Waste can, 6 L (5043-1196) | | | | | 5043-1221 |
| Stay Safe cap GL45 with 4 ports (5043-1220) | | | | | |
| Stay Safe cap kit | | | | | 5043-1222 |
| Includes 4 caps (3 x 5043-1217, 1 x 5043-1218), 4 venting valves with time strip (5043-1190), 4 fittings, 3.2 mm | | | | | |
| For Fitting Ports | | | | | |
| Fitting for 3.2 mm tubing, PFA, 2/pk | | | | | 5043-1216 |
| Fitting for 2.3 mm tubing, PFA, 2/pk | | | | | 5043-1215 |
| Fitting for 1.6 mm tubing, PFA, 2/pk | | | | | 5043-1214 |
| Screw plug, 0.12 inch, PTFE, 2/pk | | | | | 5043-1198 |
| For Vent Port | | | | | |
| Venting valve with time strip, PTFE, 1 µm | | | | | 5043-1190 |
| For Filter Port | | | | | |
| Charcoal filter with time strip (58 g) for waste container | | | | | 5043-1193 |
| For Waste Port | | | | | |
| 2-ports waste collector, PTFE | | | | | 5043-1207 |
| Screw plug, 0.25 inch, PTFE | | | | | 5043-1195 |
| Miscellaneous | | | | | |
| Thread adapter PTFE GL45 (M) - GL40 (F) | | | | | 5043-1191 |
| Thread adapter PTFE GL45 (M) - GPI 38-430 (F) | | | | | 5043-1192 |
| Waste can, 6 L GL45 | | | | | 5043-1196 |

Vacuum Degassers

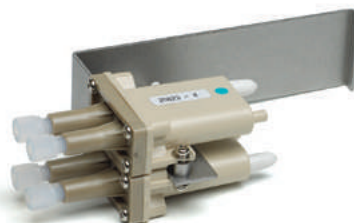
A vacuum degasser is recommended for:

- Maximum sensitivity in the low UV wavelength range
- High injection precision
- High retention time reproducibility
- Flow rates below 0.5 mL/min

Vacuum Degasser Supplies

| Description | Comments | Part No. |
|---|--|-------------|
| Vacuum Chambers and Vacuum Tubing | | |
| Vacuum chamber replacement kit, for G1379A | Includes vacuum chambers (5067-4798) 2/pk, vacuum tubing kit (5067-5388), sheet metal bottom | 5067-5387* |
| Vacuum tubing kit, for G1379A | Internal vacuum tubing kit (PharMed) | 5067-5388 |
| Vacuum chamber replacement kit, for G1379B | Includes vacuum chambers (5067-4798) 2/pk, vacuum tubing kit (5067-5380), sheet metal bottom | 5067-5383* |
| Vacuum tubing kit, for G1379B | Internal vacuum tubing kit (PharMed) | 5067-5380 |
| Replacement chamber (dual channel) | For G1379A/B. Use vacuum chamber replacement kit (5067-5383) for first time installation of this type into your G1379A/B | 5067-4798 |
| Accessory Material | | |
| Tubing kit, degasser to pump, 4/pk, 30 cm pieces of tubing with screws and bushings | For G1322A, G1379A/B, G4225A | G1322-67300 |
| Mounting tool, for flangeless nut | For G1322A, G1379A/B, G4225A | 0100-1710 |
| Plastic tubing cutter | For inlet tubing | 8710-1930 |
| PTFE solvent tubing, 5 m, 1.5 mm id, 3 mm od | Inlet tubing | 5062-2483 |
| Ferrules, Tefzel, and lock rings, stainless steel, 0.12 inch, 10/pk | | 5063-6598 |
| Nuts, polyphenylene sulfide (PPS), 0.12 inch, 1/4-28 thread, 10/pk | | 5063-6599 |
| Union, 1/4-28 thread, polypropylene, 10/pk | | 5022-2155 |
| Disposable syringes polypropylene, 20 mL, 10/pk | For priming the degassers. Use adapter (9301-1337) to connect to solvent lines. | 5067-6624 |
| Syringe adapter, 0.06 inch od, 2 inch long | To connect to 1/4-28 thread fittings of solvent lines | 9301-1337 |

*Kit is required if degasser is not already equipped with new type vacuum chambers (p/n 5067-4798)



Replacement chamber (dual channel), 5067-4798



Mounting tool, 0100-1710



Plastic tubing cutter, 8710-1930



Ferrules and rings, 5063-6598



Nuts, PPS, 5063-6599



AUTOSAMPLER SUPPLIES

Your Agilent autosampler is designed to deliver accurate measurements, precise injection volumes, and high-quality data. Agilent provides a number of injection loops and trays for your application needs.



Injection Loops

| Description | Comments | Part No. |
|---|--|-------------|
| For G1313, G1329, G1367, G7129, G7167 ALS, HiPALS, MLS, Vialsampler | | |
| Multidraw kit | 400 μ L/1400 μ L additional seat capillary volume for multidraw injection mode | G7167-68711 |
| For G1313A, G1329A/B Autosampler and 1120/1220 System with Autosampler | | |
| Sample loop, stainless steel, 100 μ L | | 01078-87302 |
| Loop capillary, PEEK, for 100 μ L sample | From biocompatibility kit | G1313-87309 |
| Loop extension capillary, stainless steel, 900 μ L | 900 μ L metering required | G1313-87303 |
| For G7129A/B Vialsampler | | |
| Sample loop, 100 μ L | Color code: White | G7129-60500 |
| Sample loop extension, 900 μ L | 900 μ L metering required | G1313-87303 |
| For G1367A/B/C Well Plate Sampler / High Performance Autosampler | | |
| Loop capillary, stainless steel, 100 μ L | | G1367-87300 |
| For G1367D High Performance Autosampler | | |
| Loop capillary, 40 μ L | | G1377-87310 |
| For G1367E, G4226A High Performance Autosampler | | |
| Flex loop kit, 20 μ L | Color code: Red | G4226-60310 |
| Flex loop kit, 40 μ L | Color code: Green | 5067-4703 |
| Flex loop kit, 100 μ L | Color code: Blue | 5067-4710 |
| For G5667A Bio-inert High Performance Autosampler | | |
| Sample loop, 100 μ L (bio-inert) | | G5667-81006 |

(Continued)

Sample Loop, 100 μ L, 01078-87302



Flex loop kit, 20 μ L, G4226-60310

Injection Loops

| Description | Comments | Part No. |
|---|---|-------------|
| Multidraw kit, bio-inert, 400 bar | Includes seat capillary extensions (PEEK) for 250 µL and 1000 µL | G5667-68711 |
| For G7167A/B Multisampler | | |
| Sample loop flex, 20 µL | Single needle option | G4267-60300 |
| Sample loop flex, 40 µL | Single needle option | G4267-60400 |
| Sample loop flex, 100 µL | Single needle option | G4267-60500 |
| Sample loop flex, 500 µL | Single needle option | G7167-68500 |
| Sample loop flex, 900 µL | Single needle option | G7167-68900 |
| Upgrade kit sample loop flex, 500 µL, right | Single needle option, includes loop and needle, requires 500 µL metering device | G7167-68500 |
| Upgrade kit sample loop flex, 900 µL, right | Single needle option, includes loop and needle, requires 900 µL metering device | G7167-68900 |
| Sample loop flex, 500-900 µL, right | Loop cartridge, sub assembly of G7167-68500/ G7167-68900 | G7167-60300 |
| Sample loop flex, 20 µL, right | Dual needle option | G4267-60311 |
| Sample loop flex, 20 µL, left | Dual needle option | G4267-60301 |
| Sample loop flex, 40 µL, right | Dual needle option | G4267-60411 |
| Sample loop flex, 40 µL, left | Dual needle option | G4267-60401 |
| Sample loop flex, 100 µL, right | Dual needle option | G4267-60511 |
| Sample loop flex, 100 µL, left | Dual needle option | G4267-60501 |
| Sample loop flex, 500 µL, right | High volume option, dual needle option | G7167-68511 |
| Sample loop flex, 500 µL, left | High volume option, dual needle option | G7167-68501 |
| Sample loop flex, 900 µL, right | High volume option, dual needle option | G7167-68911 |
| Sample loop flex, 900 µL, left | High volume option, dual needle option | G7167-68901 |
| Flex extension left dual needle | Loop cartridge, sub assembly of G7167-68501/ G7167-68901 | G7167-60301 |
| Flex extension right dual needle | Loop cartridge, sub assembly of G7167-68511/ G7167-68911 | G7167-60311 |
| For G5668 Bio-inert Multisampler | | |
| Sample loop, bio-inert, 100 µL | | G5668-60500 |



Sample loop flex, 100 µL, G4267-60500

(Continued)



Multidraw loop, 5 mL, for preperative autosampler,
G2260-68711

Injection Loops

| Description | Comments | Part No. |
|--|--|-------------|
| Multidraw kit, bio-inert, 400 bar | Includes seat capillary extensions (PEEK) for 250 µL and 1000 µL | G5667-68711 |
| For G1377A High Performance Micro Autosampler | | |
| Loop capillary, 8 µL | | G1375-87315 |
| Loop capillary, 40 µL | | G1377-87300 |
| For G2260A Preperative Autosampler | | |
| Multidraw loop, 5 mL | | G2260-68711 |
| For G2258A Dual-loop Autosampler | | |
| Buffer loop tubing assembly, PTFE | | G2258-87300 |
| Buffer loop extension assembly | | G2258-60002 |
| Capillary loop, 2 µL, stainless steel | | 5068-0031 |
| Capillary loop, 5 µL, stainless steel | | 5068-0032 |
| Capillary loop, 10 µL, stainless steel | | 5068-0051 |
| Capillary loop, 20 µL, stainless steel | | 5068-0033 |
| Capillary loop, 50 µL, stainless steel | | 5068-0034 |
| Capillary loop, 100 µL, stainless steel | | 5068-0035 |
| For G4278A LC Injector HTC / G4277A LC Injector HTS | | |
| Loop, 2 µL, Cheminert injection valve | | 5188-6457 |
| Loop, 10 µL, Cheminert injection valve | | 5188-6458 |
| Loop, 20 µL, Cheminert injection valve | | 5188-6459 |
| Loop, 50 µL, Cheminert injection valve | | 5188-6460 |
| Loop, 100 µL, Cheminert injection valve | | 5188-6461 |
| Loop, 250 µL, Cheminert injection valve | | 5188-6462 |
| Loop, 500 µL, Cheminert injection valve | | 5188-6463 |
| Loop, 1000 µL, Cheminert injection valve | | 5188-6464 |
| Loop, 2000 µL, Cheminert injection valve | | 5188-6465 |
| Loop, 5000 µL, Cheminert injection valve | | 5188-6466 |
| Loop, PEEK 2 µL, Cheminert injection valve | | 5188-6469 |
| Loop, PEEK 5 µL, Cheminert injection valve | | 5188-6470 |
| Loop, PEEK 10 µL, Cheminert injection valve | | 5188-6467 |
| Loop, PEEK 20 µL, Cheminert injection valve | | 5188-6468 |

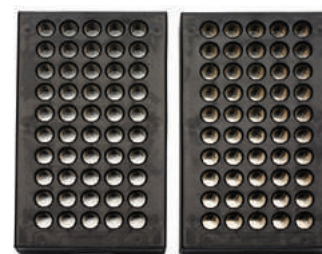
Autosampler Trays

| Description | Comments | Part No. |
|--|--|-------------|
| For G1313A, G1329A/B, G2260A, 1120/1220 Autosampler | | |
| 100 position tray, for 2 mL vials | | G1313-44510 |
| 100 position tray, for 2 mL vials | Thermostatable | G1329-60011 |
| 40 position tray, for 2 mL vials | Halftray | G1313-44512 |
| 15 position tray, for 6 mL vials | Halftray | G1313-44513 |
| External vial tray, for 17 vials (disposal position) | | G1313-60004 |
| Disposal tube, for external vial tray | | G1313-27302 |
| For G7129A/B Vial Sampler | | |
| Drawer, for 66 x 2 mL vials | 66 position tray | G7129-60010 |
| Drawer, for 18 x 6 mL vials | 18 position tray | G7129-60110 |
| Drawer kit, for 100 x 2 mL vials | 50 position tray, 2/pk Classic set up | G7129-68210 |
| External tray, for 5 x 2 mL vials | | G7129-60000 |

(Continued)



Various trays for autosampler modules

Drawer kit, for 100 x 2 mL vials,
G7129-68210**TIPS & TOOLS**

Agilent has made vial, cap, and septum selection easy with its new Interactive Vial Selection Tool, available online in both desktop and mobile versions. The tool identifies the right vial and closures for your particular application, and provides the rationale for the choices offered.

Visit www.agilent.com/chem/SelectVials

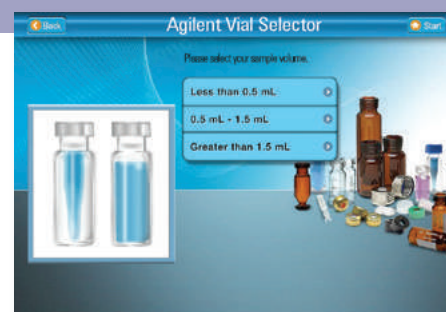




Plate for 27 Eppendorf Safe-lock tubes, 5022-6538



Standard drawer kit for multisampler, double-height (2H), G7167-60020



Vial plate for 54 x 2 mL vials, G2255-68700



Vial plate for 15 x 6 mL vials, 5022-6539

Autosampler Trays

| Description | Comments | Part No. |
|--|--|-------------|
| For G1367A/B/C/D/E, G2258A, G4226A | | |
| Well plate tray | Hosts maximum 2 well plates or vial plates plus 10 vials | G2258-60011 |
| Vial plate, for 54 x 2 mL vials, 6/pk | | G2255-68700 |
| Vial plate, for 15 x 6 mL vials | | 5022-6539 |
| Vial plate, for 40 x 2 mL vials | | 5023-2471 |
| 100 position tray, for micro vials | Not for G2258A | G4226-60021 |
| Plate for 27 Eppendorf safe-lock tubes, 0.5/1.5/2 mL | | 5022-6538 |
| For G7167A/B Multisampler | | |
| Additional standard drawer kit, double-height (2H) | Hosts maximum 2 vial plates (54 x 2 mL, 40 x 2 mL) or 2 well plates Includes sample trays, 2/pk | G7167-60020 |
| Additional drawer kit, single-height (1H), 2/pk | Host maximum 2 well plates Includes sample trays, 2/pk | G7167-60021 |
| Additional drawer kit, triple-height (3H), 2/pk | Hosts maximum 2 vial plates (4 x 2 mL, 40 x 2 mL, 15 x 6 mL) Includes sample trays, 2/pk | G7167-60022 |
| Sample trays, for drawer (1H) | | G4267-60206 |
| Sample tray for drawers (2H/3H) | | G4267-60205 |
| Vial plate, for 54 x 2 mL vials, 6/pk | | G2255-68700 |
| Vial plate, for 15 x 6 mL vials | | 5022-6539 |
| Vial plate, for 40 x 2 mL vials | | 5023-2471 |

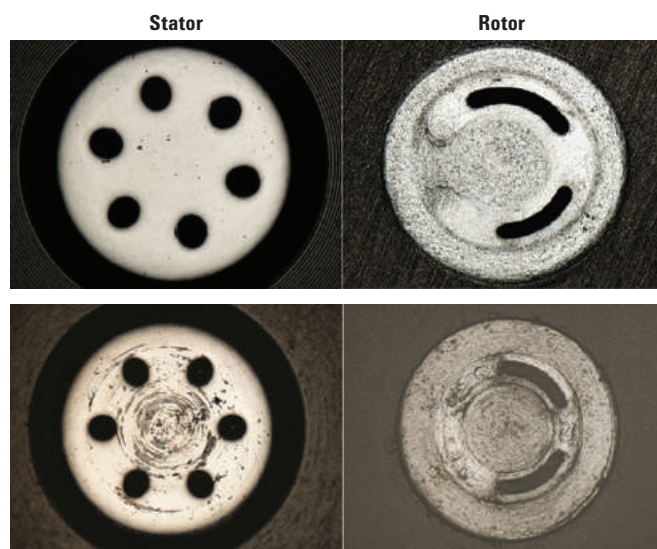
Injection Valve Supplies

Rotors

The rotor is a highly stressed part of the autosampler that is constantly switched back and forth, sliding over the stator. Its material and surface finish govern its durability and lifetime. Comparison of Agilent and third-party rotor seals has revealed major differences in these aspects.

Lifetime

Agilent rotors are tested to ensure the longest possible lifetime. After rigorous tests, the Agilent rotor surface still seemed flat and consistent, and the contacting stator surface appeared clean. In contrast, the third-party rotor already showed severe surface damage and a contaminated stator surface after 10 % fewer switch cycles. Therefore, shorter lifetime and potential carryover and leakage are expected when using third-party seals.



Stator and rotor after rigorous tests of an Agilent rotor seal, with clean and flat surfaces.

Stator and rotor after 10 % fewer switch cycles of a third-party rotor seal, showing early damage.

Injection Valve Supplies

| Valve | Use with | Rotor Seal Material | Rotor Seal | Stator | Additional Parts |
|--|--|---------------------|------------|-----------|---|
| 2 position/6 port injection valve, 400 bar | G1313A, G1329A, G1367A/B, 1120 | Vespel | 0100-1853 | 0100-1850 | Stator face p/n 0100-1851 Service kit p/n 0101-1257 |
| | | Tefzel | 0100-1849 | | |
| | | PEEK | 0100-2231 | | |
| 2 position/6 port injection valve, 600 bar | G1329B, G1367C, G1367D, G1367E, 1220 Infinity LC | PEEK | 0101-1416 | 0101-1417 | |
| Bio-inert 2 position/6 port injection valve | G5667A | PEEK | 5068-0099 | 5068-0060 | Stator face p/n 0100-1851 Bearing ring p/n 1535-4045 |
| Bio-inert 2 position/6 port injection valve head | G5668A | PEEK | 5068-0209 | 5068-0060 | Stator face p/n 0100-1851 Bearing ring p/n 1535-4045 |
| 2 position/6 port ultra high pressure valve, 1200 bar | G4226A | Vespel | 5068-0007 | 5068-0006 | |
| 2 position/6 port injection valve, vial sampler | G7129A | PEEK | 0101-1416 | 5068-0215 | Bearing ring p/n 1535-4045 |
| 2 position/6 port injection valve, 1300 bar, vial sampler | G7129B | Vespel | 5067-0007 | 5068-0216 | Bearing ring p/n 1535-4045 |
| 2 position/6 port injection valve, multisampler | G7167A | PEEK | 5068-0209 | 5068-0208 | Bearing ring p/n 1535-4045 |
| 2 position/6 port injection valve, 1300 bar, multisampler | G7167B | PEEK | 5068-0198 | 5068-0197 | Bearing ring p/n 1535-4045 |
| 2 position/6 port micro injection valve, 400 bar | G1377A, G1389A | Vespel | 0100-2088 | 0100-2089 | |
| 2 position/10 port injection valve | G2258A | Vespel | 0100-2415 | 0101-1390 | |
| 2 position/6 port MBB injection valve, 400 bar | G2260A | PEEK | 0101-1268 | 0100-2195 | Service kit p/n 0101-1268 |
| 2 position/6 port injection valve, 1200 bar, PAL Injector (CTC), (p/n 5067-4123) | G4277A, G4278A | Vespel | 5068-0030 | 5068-0029 | |
| 2 position/6 port injection valve, 1200 bar, for PAL ALS (p/n 5067-4261) | G4277A/G4278A | Vespel | 5068-0234 | 5068-0235 | Bearing ring p/n 1535-4045 |
| 2 position/6 port injection valve, 600 bar, CTC | G4270-CTC/G4271-CTC | PEEK | 5188-6492* | | |

*Rotor seal is part of RheBuild kit, 5188-6492



Stator for 2 position/6 port switching valve, 600 bar,
0101-1417

Needles and Needle Seats

The needle should be replaced when it becomes bent, burred, or blunt, or when it is leaking or plugged. Suspect a leak if you notice a trail of buffer crystals on the needle seat. If the sample contains particulates the needle seat can become blocked, as this is the first restriction that the sample experiences. If this occurs, try backflushing the needle seat capillary.

Needles and Needle Seats

| Agilent Autosampler | Needle Assembly Description | Part No. | Compatible with Needle Seat | Part No. |
|--|---|-------------|--|-------------|
| Standard Autosamplers and Vial Samplers | | | | |
| G1313A, G1329A/B, 1120, 1220 Infinity LC | Needle assembly, standard autosampler | G1313-87201 | Standard needle seat, PEEK, 0.17 mm id capillary, 2.3 µL | G1329-87017 |
| | | | Standard needle seat, PEEK, 0.12 mm id capillary, 1.2 µL | G1329-87012 |
| G1313A, G1329A, 1120, 1220 | Needle assembly, for use with PEEK seat | G1313-87203 | Standard needle seat, PEEK, 0.17 mm id capillary, 2.3 µL | G1313-87102 |
| G1313A, G1329A/B, 1120/1220 | Needle, 900 µL | G1313-87202 | Standard needle seat, PEEK, 0.17 mm id capillary, 2.3 µL | G1329-87017 |
| G7129A | Needle 1260 Infinity autosampler | G7129-87200 | Seat assembly, PEEK, 0.17 mm | G7129-87017 |
| G7129B | Needle assembly 1290 Infinity II vialsampler | G7129-87201 | Seat assembly, PEEK, 0.12 mm | G7129-87012 |
| G7129A | Needle assembly (slotted), for high injection volumes | G7129-87202 | Seat assembly, PEEK, 0.17 mm | G7129-87017 |
| G1389A | µ-LC needle for G1329 autosampler | G1329-80001 | | |
| G1313A, G1329A/B, G1389A, G2260A, 1120/1220 | | | Seat adapter | G1313-43204 |

(Continued)



Needle assembly 1290 vialsampler,
G7129-87201



Needle seat, PEEK, 600 bar, 0.12 mm id,
G1367-87012



Needle assembly multisampler,
G4267-87201



Seat adapter,
G1313-43204

Needles and Needle Seats

| Agilent Autosampler | Needle Assembly Description | Part No. | Compatible with Needle Seat | Part No. |
|---|---|-------------|---|-------------|
| Well Plate/ High Performance Autosampler / Multisampler | | | | |
| G1367A/B | Needle assembly, standard well plate sampler | G1367-87201 | Needle seat Vespel, well plate autosampler (0.17 mm id capillary, 2.3 µL) | G1367-87101 |
| G1367C | Needle assembly G1367D | G1367-87202 | Low carry over seat, PEEK, 0.17 mm | G1367-87017 |
| G1367D | Needle assembly G1367D | G1367-87202 | Low carry over seat, PEEK, 0.12 mm | G1367-87012 |
| G1367E | Needle assembly | G4226-87201 | Low carry over seat, PEEK, 0.12 mm | G1367-87012 |
| G4226A | Needle assembly | G4226-87201 | Seat assembly, Vespel, 0.12 mm, 1290 Infinity LC | G4226-87012 |
| G7167A/B | Needle assembly multisampler | G4267-87201 | High pressure needle seat, PEEK, 0.12 mm | G4267-87012 |
| | Needle assembly (slotted), for high injection volumes | G4267-87210 | | |
| | Needle assembly, ultra low dispersion | G4267-87020 | | |
| Bio-inert Samplers | | | | |
| G5667A | Bio-inert needle assembly | G5667-87200 | Bio-inert seat assembly, for high performance autosampler | G5667-81008 |
| G5668A | Needle bio-inert multisampler | G5668-87200 | Bio-inert seat assembly, for multisampler | G5668-87017 |
| Preparative Scale / Micro Scale Autosamplers | | | | |
| G2258A | Needle kit | G2258-68710 | Twin needle seat, dual loop autosampler | G2258-87102 |
| G2260A | Needle assembly, preparative autosampler | G2260-87201 | Needle seat, preparative autosampler 0.5 mm id, 20 µL | G2260-87101 |
| G1377A | Needle assembly, microwell plate sampler | G1377-87201 | Micro needle seat, with seat capillary, 100 µm | G1377-87000 |
| | | | Micro needle seat, with seat capillary, 75 µm | G1377-87001 |
| | | | Micro needle seat, with seat capillary, 50 µm | G1377-87002 |
| | | | Micro needle seat | G1377-87101 |
| HTC/HTS/CTC LC Injectors | | | | |
| G4277A, G4278A | PEEK needle seal, Valco, 22 gauge, 10/pk | 5188-6476 | | |
| G4277A, G4278A | PTFE needle seal, Valco, 22 gauge, 10/pk | 5188-6477 | | |
| G4277A, G4278A | DLW 1 needle kit | G4277-80125 | Needle seal, Rheodyne 7991, 22 gauge | 5188-6478 |
| G4277A, G4278A | DLW 2 holding loop (stainless steel) assembly with needle | G4277-60602 | Needle seal, Rheodyne 7991, 22 gauge | 5188-6478 |
| G4270/71 - CTC | Syringe needle | 9301-0407 | | |
| G4277A, G4278A | | | PAL3 needle seat, PEEK | 5188-8052 |
| Needle Wash Parts | | | | |
| G1367A-E, G1377A, G4226A, G5667A, G7129A/B, | Peristaltic pump cassette with PharMed tubing | 5065-4445 | | |
| | Tubing, PTFE, 5 m (1.6 mm od, 0.7 mm id) | 5062-2462 | | |

Metering Device Supplies

Infrequently, the metering device seal and piston may need replacement if you see loss in injection volume precision or metering device leaking.

Metering Device Supplies

| Agilent Autosampler | Piston Description | Part No. | Metering Seal | Part No. |
|--|--------------------------|-------------|---|-------------|
| Standard Autosamplers and Vialsamplers | | | | |
| G1313A, G1329A/B, G1367A/B/C, G1367E, 1120/1220 | Piston, sapphire, 100 µL | 5063-6586 | Piston seal, PTFE, 2/pk | 5063-6589 |
| G7129A | Piston, ceramic, 100 µL | 5067-5678 | Piston seal, PTFE, 2/pk | 5063-6589 |
| G7129B | Piston, ceramic, 40 µL | 5067-5920 | Metering seal, 40 µL | 0905-1717 |
| G7129A, G7167A (high volume option) | Piston assembly, 900 µL | G4267-60462 | Metering seal, 900 µL | 0905-1294 |
| Well Plate/ High Performance Autosampler / Multisampler | | | | |
| G1367D, G1389A, G1377A | Piston, sapphire, 40 µL | 5064-8293 | Piston seal, 2 mm | 5022-2175 |
| G4226A | Piston, sapphire, 40 µL | 5064-8293 | Metering seal, 40 µL | 0905-1717 |
| G7167A | Piston, ceramic, 100 µL | 5067-5678 | Metering seal, 100 µL | 0905-1719 |
| G7167B | Piston, ceramic, 40 µL | 5067-5620 | Metering seal, 40 µL | 0905-1717 |
| G7167A/B multiwash option flushhead | Piston assembly, 500 µL | 5067-5919 | Seal, 500 µL | 5067-5918 |
| CTC, G4277, G4278 | DLW syringe, 100 µL | G4277-80120 | DLW syringe plunger, for 100 µL syringe | G4277-80122 |

(Continued)



Piston assembly (40 µL) for G7129B, 5067-5920



Piston seals, 5063-6589

Metering Device Supplies

| Agilent Autosampler | Piston Description | Part No. | Metering Seal | Part No. |
|---|---------------------------|-----------------|-------------------------|-----------------|
| Bio-inert Samplers | | | | |
| G5667A | Piston, sapphire, 100 µL | 5063-6586 | Piston seal (bio-inert) | G5611-21503 |
| G5668A | Piston, ceramic, 100 µL | 5067-5678 | Piston seal (bio-inert) | G5611-21503 |
| Preperative Scale / Micro Scale Autosamplers | | | | |
| G2258A | Piston, 5 mL | G2258-60003 | Piston seal | 0905-1599 |
| G2260A | Piston assembly, 900 µL | 5062-8587 | Metering seal, 900 µL | 0905-1294 |
| G1389A, G1377A | Piston, sapphire, 40 µL | 5064-8293 | Piston seal, 2 mm | 5022-2175 |

Accessories

| Description | Use With | Part No. |
|---|---|-----------------|
| Seat adapter | G1313A, G1329A, G1389A, G2260A, 1120 and 1220 Infinity LC | G1313-43204 |
| Finger caps, for autosampler gripper, 15/pk | G1313A, G1329A/B, G1389A, G2260A, G7129A/B, 1120 and 1220 Infinity LC | 5063-6506 |
| Tool, for micro seat capillary mounting | G1377A | G1377-44900 |
| Seat extension capillary, 0.5 mL, 0.5 mm id | G1329A/B | G1313-87307 |



Sapphire piston, 5062-8587

Easy-to-use hardware available in all chemistries

High-performance Agilent UHPLC guards are designed for use with fast LC columns. They connect directly to the column inlet; no extra hardware is needed.

Agilent UHPLC guards are available in all InfinityLab Poroshell 120 chemistries—giving you confidence that the guard column will not adversely affect your separations.

Turn to **Pages 128–131** to find out more.



Autosampler Kits

Autosampler Kits

| Description | Kit Contents | Part No. |
|---|--|-------------|
| Upgrade Kits | | |
| Multidraw upgrade kit, for G1313A, G1329A/B, G7129A/B, G7167A/B (no dual loop, requires 900 μ L option) | Includes 500 μ L and 1500 μ L seat extension capillary, ZDV union, and installation instructions | G7167-68711 |
| Large volume injection kit, for the Agilent 1290 Infinity LC autosampler G4226A | Includes 1200 bar multidraw technical note, capillary seat, 80 μ L, 0.5 mm id, 0.9 mm od | G4216-68711 |
| Flex loop kit, 40 μ L, for the Agilent 1290 Infinity LC autosampler G4226A | Increases the maximum draw volume of the autosampler | 5067-4703 |
| Door Replacement Kits | | |
| Cabinet upgrade kit, for 1260 Infinity LC sampler | Includes side panel, top cover, and front door | G1329-68736 |
| Cabinet kit, for G1367E and G4226A | Includes side panel, base plate, and top cover | 5067-4662 |
| Door replacement kit, for 1260 Infinity LC sampler | Includes front and side doors | G1329-68737 |
| Door repair kit, for G1367E and G4226A | Includes front door and carrier bolt | G4226-67001 |
| Light protection kit, for G1329A | Includes opaque front, side doors, and front cover | G1329-68718 |
| Door replacement kit, for G1329A | Includes transparent front and side doors | G1329-68727 |



Cabinet upgrade kit, for 1260 Infinity LC sampler, G1329-68736



Collection plate, showing 96-position closing mat, 5042-1389

Well Plates and Closing Mats

Well Plates and Closing Mats

| Description | Sample Volume | Material | Certified | Unit | Part No. |
|--|---------------|---------------|-----------|---------|-----------|
| 384-well plate | 90 μ L | Polypropylene | | 30/pk | 5042-1388 |
| 96-well plate, skirted | 150 μ L | | | 25/pk | 5042-8502 |
| 96-well plate, with glass inserts, caps, septa preassembled | 350 μ L | | | 1/pk | 5065-4402 |
| 96-well plate | 500 μ L | Polypropylene | | 120/pk | 5042-1385 |
| 96-well plate | 500 μ L | Polypropylene | | 10/pk | 5042-1386 |
| 96 deep-well plate | 1 mL | Polypropylene | | 50/pk | 5042-6454 |
| Insert and cap/septa kit, for deep-well collection plates. Includes 350 μ L inserts and caps/septa. Ideal for refilling kit 5065-4402. | | | Y | 1000/pk | 5190-2237 |
| Closing mat, micro mat, square, for 96-well plate | | | | 10/pk | SN800220 |
| Closing mat, for 96-well plate | | Silicone | | 50/pk | 5042-1389 |



Screw cap, bonded, blue, PTFE/white silicone septa, 5190-7021



A-Line screw top vial, 2 mL, clear, with write-on spot, 5190-9589



A-Line screw top vial, 2 mL, amber, with write-on spot, 5190-9590

Vials and Sample Containment Solutions

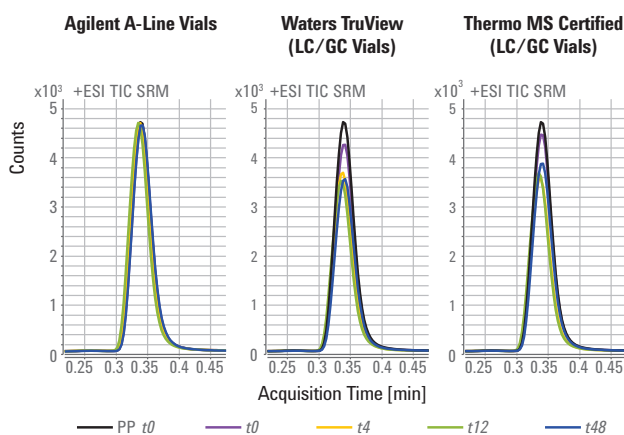
Save Money, and Eliminate Drains on your Labs Productivity

Using poor-quality vials (or the wrong vials for your application) can cause sequence problems, unnecessary downtime, expensive repairs, and the loss of your precious samples.

Agilent A-Line vials are produced from the best sourced glass in the range-type 1 borosilicate, 51 coefficient of expansion glass. This type of glass will not remove analytes from your sample matrixes, meaning that Agilent A-Line vials are the ultimate solution for your precious samples. In addition, they are the only vials that deliver time and cost-saving advantages like these:

- **Maximum inertness:** The inert performance of Agilent A-Line vials, results in reduced analyte peak variability, so you can have the utmost confidence in your results.
- **Consistent performance:** Vial-to-vial lot-to-lot Agilent A-Line vials demonstrate consistent performance, so you spend less time troubleshooting and rerunning samples.
- **Certification of analysis:** Agilent A-Line vials come with a certificate of analysis, so you can be sure that they will perform even in the most demanding environments.
- **Designed to fit a range of caps:** Agilent A-Line vials can be used with your existing 2 mL autosampler caps, for easier inventory management.
- **Fewer septa issues:** Agilent septa are continually being improved to limit leaching, coring, sticking, push-through, hardness, and adsorption/absorption.
- **Fast delivery:** Our worldwide distribution centers can make sure that your order reaches your lab within 48 hours.

Agilent A-Line vials: Better analyte retention over time



Agilent A-Line vial shows superior analyte retention in this separation of doxepin.

Note: Tests were carried out by Agilent.

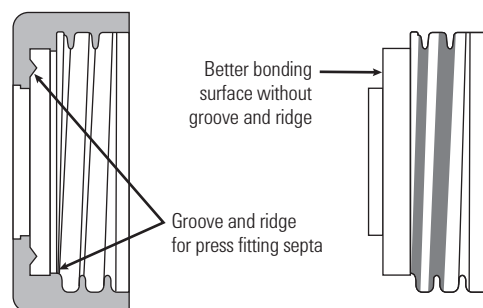
Vials and Sample Containment Solutions

| Description | Part No. |
|---|------------|
| Vials | |
| A-Line screw top vial, 2 mL, clear, with write-on spot, 100/pk | 5190-9589 |
| A-Line screw top vial, 2 mL, amber, with write-on spot, 100/pk | 5190-9590 |
| A-Line crimp top vial, 2 mL, clear, with write-on spot, 100/pk | 5190-9591 |
| A-Line crimp top vial, 2 mL, amber, with write-on spot, 100/pk | 5190-9592 |
| Caps | |
| Screw cap, bonded, blue, PTFE/white silicone septa, 100/pk | 5190-7021 |
| Screw cap, bonded, blue, preslit, PTFE/white silicone septa, 100/pk | 5190-7023* |
| Crimp cap, silver aluminum, PTFE/white silicone septa, 100/pk | 5182-0552 |

*Recommended for high volume injections



Press fit VS bonded caps



HUNDREDS OF CHOICES... ONE EASY GUIDE

Use our online selection tool to quickly find the right products for complete confidence in your sample containment.

- Answer a few simple questions to identify your best options
- Search by technique, product number, or vial type
- Make a perfect pick from more than 600 vials, caps, and septa

To access the tool, and for product brochure, white papers, free poster, and more, go to: **www.agilent.com/chem/vialsresources**





FRACTION COLLECTOR SUPPLIES

Agilent fraction collectors are designed to process data in real-time for instantaneous and precise fraction collection, while increasing throughput on your purification system. So you can be certain that you are getting the highest degree of recovery and purity for your fractions—even with low flow rates.

The Agilent 1290 Infinity II preparative open-bed fraction collector enables high-capacity fraction collection of purified peaks for semipreparative and preparative-scale LC purification with:

- **High flexibility and throughput** enabling collection of up to 432 fractions, or a volume up to 5.9 L
- **Lowest delay volumes** minimizing peak dispersion and carryover between fractions
- **Accurate peak collection** with unique automated delay sensor
- **Bio-inert flowpath** ideal for protein purification



1290 Infinity II preparative OpenBed fraction collector, G7159B



Fraction Collector Maintenance Schedule

| Procedure | When to Perform |
|---|--|
| Analytical and Preparative Fraction Collector Maintenance | |
| Replace the inlet/waste tubing | Once per year, or when you notice signs of damage or wear |
| Replace the valve-to-needle tubing | Once per year, or when you notice signs of damage or wear |
| Exchange the preparative needle assembly | When the needle shows signs of damage or blockage |
| Exchange the analytical needle assembly | When the needle shows signs of damage or blockage, or when using the short needle assembly with tall test tubes (>45 mm) |
| Exchange the diverter valve | When the valve is leaking or not switching properly |
| Exchange the internal tray | When the flow delay sensor no longer works |
| Repair or exchange a funnel within the internal tray or funnel tray | When defective, leaky, blocked, or contaminated |
| Micro Fraction Collector/Spotter Maintenance | |
| Replace fraction collector capillary | At least every six months or when worn, blocked, or damaged |
| Exchange the capillary guiding assembly | When bent or damaged |
| Exchange the internal tray | When the flow delay sensor no longer works properly |
| Exchange the flap septum and waste tubing | At least every six months or when defective or contaminated |



Test Tubes

| Tube Dimensions (id x Height) | Volume | Use With | Unit | Part No. |
|-------------------------------|--------|----------------|--------|-----------|
| 12 x 100 mm | 8 mL | G1364B, G7159B | 250/pk | 5022-6531 |
| 12 x 150 mm | 11 mL | G7159B | 250/pk | 5190-9093 |
| 16 x 100 mm | 13 mL | G1364B, G7159B | 250/pk | 5022-6532 |
| 16 x 150 mm | 21 mL | G7159B | 250/pk | 5190-9092 |
| 25 x 100 mm | 35 mL | G1364B, G7159B | 100/pk | 5042-6459 |
| 25 x 150 mm | 55 mL | G7159B | 100/pk | 5190-9091 |
| 30 x 100 mm | 58 mL | G1364B, G7159B | 100/pk | 5042-6458 |
| 30 x 150 mm | 85 mL | G7159B | 100/pk | 5190-9090 |

Trays for Fraction Collectors (G1364B/C)

| Hole Diameter (mm) | No. of Tubes | Tray Part No. |
|--------------------|--------------|---------------|
| 30 | 40 | G1364-84523 |
| 25 | 60 | G1364-84524 |
| 16 | 126 | G1364-84525 |
| 12 | 215 | G1364-84516 |

Funnel Trays for Fraction Collectors (G1364BC)

| Description | Part No. |
|---|-------------|
| Half tray, for 40 funnels | G1364-84532 |
| Tray, for 2 well plates and 10 collecting funnels | G1364-84522 |
| Funnel seal kit, 10/pk | G1364-68730 |
| Tubing kit, 10 tubes | G1364-86707 |



Funnel tray for G1364C fraction collector,
G1364-84532

InfinityLab Tube Containers and Drawer (G7159B)

| Description | Part No. |
|--|-------------|
| Drawer for G7159B, ambient temperature | G9321-60085 |
| Tube container, 30 x 150 mm, 10 tubes, ambient | G9321-60015 |
| Tube container, 30 x 100 mm, 10 tubes, ambient | G9321-60058 |
| Tube container, 25 x 150 mm, 18 tubes, ambient | G9321-60025 |
| Tube container, 25 x 100 mm, 18 tubes, ambient | G9321-60035 |
| Tube container, 16 x 150 mm, 36 tubes, ambient | G9321-60129 |
| Tube container, 16 x 100 mm, 36 tubes, ambient | G9321-60055 |
| Tube container, 12 x 150 mm, 72 tubes, ambient | G9321-60131 |
| Tube container, 12 x 100 mm, 72 tubes, ambient | G9321-60045 |

Note: The drawers and containers of the fraction collector use RFID tags to detect the dimensions of test tubes automatically.



Tube container, G9321-60055
and drawer, G9321-60085

1290 Infinity II LC OpenBed Fraction Collector Supplies (G7159B)

| Description | Part No. |
|--|-------------|
| 1290 Infinity II HiP preparative fraction collector tubing kit, 50 mL/min | G9321-60952 |
| 1290 Infinity II HiP preparative fraction collector tubing kit, 200 mL/min | G9321-60951 |
| Fitting 1/4-28, for tube od 2.5 mm, ESD-PEEK | 5023-2871 |
| Fitting 1/4-28, for tube od 2.0 mm, ESD-PEEK | 5023-2872 |
| Fitting 1/4-28, for tube od 1.4 mm, ESD-PEEK | 5023-2874 |
| Delay calibrant | G9321-60592 |



1260 Infinity II preparative valve-based fraction
collector, G7166A

1260 Infinity II Preparative Valve-Based Fraction Collector Supplies (G7166A)

| Description | Part No. |
|--|------------|
| PTFE tubing, ESD-striped, 1.6 mm id, 2.5 mm od, 6 m length | 5023-2882 |
| PTFE tubing, ESD-striped, 1.2 mm id, 2.0 mm od, 2 m length | 5023-2878 |
| Fitting, 1/4-28, tube, 2 mm od, ESD-PEEK | 5023-2872 |
| Fitting, 1/4-28, for od 2.5 mm, ESD-PEEK, 6/pk | 5023-2883 |
| Tubing, polyurethane, 4 mm x 6 mm, 2 m | 3710043100 |
| Elbow, 6 mm push fit x male 1/8 BSP | 1610140200 |

Fraction Collector Capillary Kits and Needles

| Module | Max Flow Rate | Tube Size | Tubing Kit | Needle Length | Needle | Typical Use |
|--------|---------------|------------|-------------|---------------|-------------|---------------------------------------|
| G1364B | 100 mL/min | 0.8 mm id | G1364-68711 | | G1364-87201 | Tubes (max 100 mm) |
| G1364C | 1 mL/min | 0.15 mm id | G1364-68723 | 50 mm | G1367-87200 | Tubes (max 48 mm), well plates, vials |
| | 10 mL/min | 0.25 mm id | G1364-68712 | 50 mm | G1367-87200 | |
| | 10 mL/min | 0.25 mm id | G1364-68712 | 20 mm | G1364-87202 | Funnel tray (tubes max 75 mm) |
| | 100 mL/min | 0.8 mm id | G1364-68711 | 20 mm | G1364-87202 | |
| G1364D | 4 µL/min | 25 µm id | G1364-87304 | | | MALDI targets, well plates |
| | 4-30 µL/min | 50 µm id | G1364-87305 | | | |
| | 30-100 µL/min | 100 µm id | G1364-87306 | | | |
| G7159B | 50 mL/min | | G9321-60952 | | | |
| G7159B | 200 mL/min | | G9321-60951 | | | |

TIPS & TOOLS

Information on maintenance procedures can be found at www.agilent.com/chem/LCmaintenancenotes



MALDI spotting adapter, for G1364D, G1364-83205



Well plate adapter assembly for G1364C/D,
G1364-60021

Micro Fraction Collector Supplies for G1364D

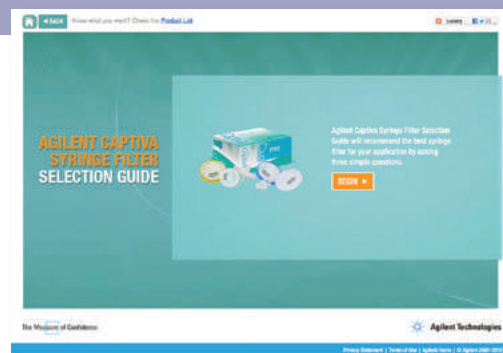
| Description | Part No. |
|--|-------------|
| MALDI spotting adapter, for G1364D | G1364-83205 |
| Well plate adapter assembly, for G1364C/D | G1364-60021 |
| Flap septum, PEEK, for internal tray | G1364-27107 |
| Capillary, fused silica/PEEK, 25 µm, 50 cm | G1364-87304 |
| Capillary, fused silica/PEEK, 50 µm, 50 cm | G1364-87305 |
| Capillary, fused silica/PEEK, 100 µm, 50 cm | G1364-87306 |
| Waste tube, PTFE, 20 cm, 1.4 mm id, 2.0 mm od | G1364-86711 |
| MALDI plate carrier, Bruker PAC | 5022-6546 |
| MALDI plate carrier, ABI Opti-TOF | 5023-0238 |
| MALDI plate carrier, Agilent | 5022-6543 |
| Target plate, for AP-MALDI LC/MS | G1972-60025 |
| On-line matrix kit, for MALDI spotting | G1364-68706 |
| Includes BCD board/cable, syringe, needles, adapters, connector, and capillary | |
| Adapter, union, PEEK 1/4-28 | 5042-8517 |
| Adapter, male Luer to female 1/4-28 | 5042-8518 |
| Micro T-connector, PEEK, swept volume 29 nL, with 1/32 inch id fittings | 5042-8519 |
| MALDI spotting tips, PTFE, 10/pk | G1364-81701 |

TIPS & TOOLS

Filter samples prior to analysis to ensure that fine particulates don't affect your LC system or results.

Our syringe filter online selection guide makes it fast and easy to choose the best syringe filter for your application. Try it now at:

www.agilent.com/chem/selectfilters



THERMOSTATED COLUMN COMPARTMENT/MULTICOLUMN THERMOSTAT AND VALVE SUPPLIES

InfinityLab column ID tags

Get the information you need for the highest-quality results on your InfinityLab LC Series instrument.

Column ID tags allow you to track various column properties and usage parameters including, but not limited to: column identity, lot and batch number, the last injection date, number of injections, and the maximum temperature used. Column ID tags ensure traceability of analysis, making documenting columns and conditions for routine analysis easy and adding confidence to any analysis.

- **Usability** – Easily find column details
- **Traceability** – Always know exactly which column is/was installed
- **Security** – Protect against the use of methods incompatible with the column



InfinityLab column ID tag, 5067-5917

Column Compartment Supplies

| Description | Comments | Part No. |
|--|---|-------------|
| Number clip kit, 1–8, colored, for columns and fittings | Clips for number and color coding your connections and columns in multicolumn selection setups, 24 clips, numbered from 1–8, three sets of each color | 5067-6654 |
| For Thermostatted Column Compartment (G1316A/B/C) | | |
| Bio-inert low dispersion heat exchanger | | G5616-81000 |
| Column clamp, 6/pk | | 5063-6526 |
| Column holder for micro LC columns | Helps fixing micro LC columns to the TCC's heater element | 5001-3702 |
| Low dispersion heat exchanger double kit (0.12 mm id, 1.6 µL volume) | Supports 2 channels, female connectors at in- and outlet side allows the connection of various capillaries (G1316B/C) | G1316-80022 |
| Thermal column insulation enclosure kit | Reduces RI baseline wander effects at high ACN content water mixtures in combination with amino-functionally columns | G1316-60001 |

(Continued)

TIPS & TOOLS

Check out InfinityLab fittings and capillaries for more information on making the perfect connection. Turn to **Pages 103–106** or visit www.agilent.com/chem/infinitylabfittings



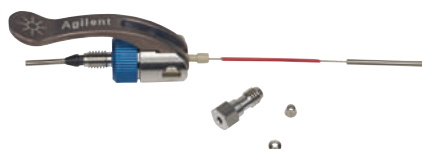
Low dispersion heat exchanger double kit for G1316B/C, G1316-80022

Column Compartment Supplies

| Description | Comments | Part No. |
|---|---|-------------|
| For G7116A/B Multicolumn Thermostat | | |
| InfinityLab Quick-Connect heat exchanger, standard (0.12 mm id, 1.6 µL volume) | Standard Quick-Connect heat exchanger for G7116B | G7116-60015 |
| InfinityLab Quick-Connect heat exchanger, high flow (0.12 mm id, 3.0 µL volume) | | G7116-60031 |
| InfinityLab Quick-Connect heat exchanger, large id (0.17 mm id, 3.0 µL volume) | Standard Quick-Connect heat exchanger for G7116A | G7116-60051 |
| InfinityLab Quick-Connect heat exchanger, large id, high flow (0.17 mm id, 6.0 µL volume) | | G7116-60061 |
| InfinityLab Quick-Connect heat exchanger, bio-inert (0.17 mm id) | Includes Quick Connect fitting and UHP-FF fitting | G7116-60009 |
| InfinityLab Quick-Connect heat exchanger, bio-inert (0.17 mm id) | No fittings included | G7116-60041 |
| Low dispersion kit, for Agilent 1290 Infinity II LC | Includes Quick-Connect heat exchanger (0.075 mm id, 1.1 µL volume) and connecting capillaries | 5067-5963 |
| InfinityLab column ID tag assembly (programmable) | Column ID reader option required, can also be used with Internal Column Compartment of G7129A/B | 5067-5917 |
| Column holder clips, soft, 2/pk | | G7116-68003 |
| Column holder clamp, 2/pk | | G7116-68004 |
| Rotor seal, PEEK, for 4-column switching valve, 600 bar | | 5068-0264 |
| Rotor seal, PEEK, for 2 position/6 port valve, 600 bar | | 0101-1409 |
| Rotor seal, PEEK, for 2 position/10 port valve, 600 bar | | 0101-1415 |
| Rotor seal, PEEK, for 8-column switching valve, 1300 bar | G7116B | 5068-0200 |
| Column Connect Capillaries | | |
| InfinityLab Quick Connect assembly, stainless steel, 0.12 x 105 mm | Quick Connect fitting, with premounted capillary | 5067-5957 |
| InfinityLab Quick Connect assembly, stainless steel, 0.17 x 105 mm | Quick Connect fitting, with premounted capillary | 5067-6166 |
| Column connection capillary, 0.17 x 90 mm | Includes 2 nonswaged steel fittings male | G1316-87300 |
| Column connection capillary, 0.12 x 70 mm | Includes 2 nonswaged steel fittings male | G1316-87303 |
| Column connection capillary, 0.12 x 180 mm | Includes 2 nonswaged steel fittings male | G1313-87304 |
| Column connection capillary, 0.17 x 180 mm | Includes 2 nonswaged steel fittings male | G1313-87305 |



Column holder clamp, 2/pk, G7116-68004



InfinityLab Quick Connect assembly, 5067-5957



InfinityLab Quick-Connect heat exchangers, G7116-60015 and column holder clips, soft, G7116-68003 for the MCT

Valve Supplies

Agilent's industry-leading manual injection valves are designed to ensure trouble-free operation with your HPLC System.

Our valves also feature patented Make-Before-Break architecture that allows you to switch between *load* and *inject* positions without interrupting the flow. So you can analyze more samples in less time.



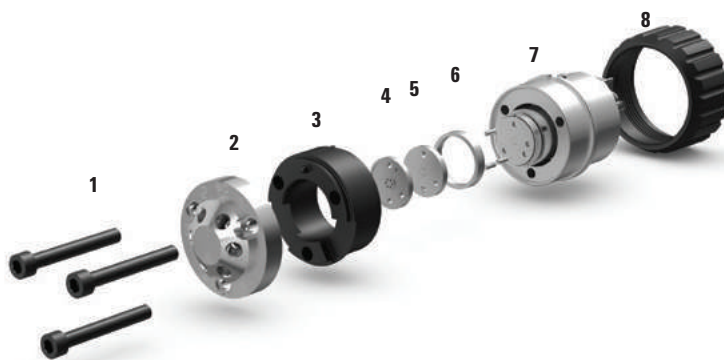
Valve Maintenance Notes

- **Vespel** is a polyimide with low wear and high chemical resistance. Vespel tolerates a pH range of 0 to 10. More basic solutions dissolve Vespel, which damages the rotor seal
- **PEEK** offers a high chemical resistance and versatility, and will tolerate the entire pH range from 0 to 14
- **Tefzel** is recommended for use in applications where PEEK cannot be used, such as methylene chloride or DMSO in higher concentrations



| pH Range | 0-7 | 7-10 | 10-14 |
|----------|-----|------|-------|
| Vespel | | | |
| PEEK | | | |
| Tefzel | | | |

Valve Parts



1. **Stator screws**
2. **Stator head** – Supported port size depends on the valve type
3. **Stator face seal** – Only used on some valves
4. **Stator ring** – Not available for all valves
5. **Rotor seal** – Alternatives in rotor seal material only available as listed in the tables
6. **Bearing ring / isolation seal** – Bearing ring for all Quick Change valve heads (p/n 1535-4045)
7. **Valve body** – No maintainable parts
8. **Spanner nut** – (p/n 5068-0106)



InfinityLab Quick Change Valve and Switching Valve Supplies

A set of valve types specially designed for Agilent HPLC systems allows you to extend your HPLC applications. New valve offerings give you:

- More flexibility in solvent selection and column selection
- New automation capabilities in sample preparation
- Increased sample throughput through alternating column regeneration
- Increased separation performance with multidimensional chromatography

Column Switching Valves Replacement Parts (G1316A/G1316B)

| Description | Use With | Rotor Seal Material | Rotor Seal | Stator Face | Stator Head | Bearing Ring | Repair Kit |
|---|-------------------------------|---------------------|------------|-------------|-------------|--------------|------------|
| 2 position/6 port, 400 bar | G1316A/B | Tefzel | 0100-1854 | 0100-1851 | 0100-1850 | 0100-1852 | 0101-1258 |
| | | VespeI | 0100-1855 | | | | |
| | | PEEK | 0100-2233 | | | | |
| 2 position/10 port column switching valve, 400 bar | G1316A | PEEK | Repair kit | Repair kit | 0101-1362 | 0100-1852 | 0101-1360 |
| 2 position/6 port HP column switching valve, 600 bar | G1316A 1260 Series/ G1316B | PEEK | 0101-1409 | | 0101-1417 | 1535-4045 | |
| 2 position/6 port micro column switching valve, 400 bar | G1316A | VespeI | 0100-2087 | | 0100-2089 | | |



Stator for 2 position/6 port switching valve, 600 bar,
0101-1417



Rotor seal, 2 position/6 port, 600 bar,
for G1316B, 0101-1409

InfinityLab Quick Change Valve Supplies

Quick Change valve heads can be used with G1316C, G1170A, G4227A, G7116A/B modules

| Description | Rotor Seal | Stator Head | Port Size | Stator Ring | Stator Face | Comments |
|---|------------|-------------|-----------|-------------|-------------|----------|
| 2 Position Switching Valves | | | | | | |
| 2 position/6 port valve head, 600 bar (p/n 5067-4137) | 0101-1409 | 0101-1417 | 10-32 | 5068-0120 | | |
| 2 position/6 port valve head, 1200 bar (p/n 5067-4117) | 5068-0008 | 5068-0006 | 10-32 | 5068-0120 | | |
| 2 position/6 port valve head, 1300 bar (p/n 5067-4241) | 5068-0207 | 5068-0006 | 10-32 | 5068-0120 | | G7116B |
| 2 position/10 port micro valve head, 600 bar (p/n 5067-4144) | 0101-1415 | 0101-1421 | M4 | - | | |
| 2 position/10 port valve head, 600 bar (p/n 5067-4145) | 0101-1415 | 5068-0165 | 10-32 | - | | |
| 2 position/10 port valve head, 1200 bar (p/n 5067-4118) | 5068-0012 | 5068-0011 | 10-32 | - | | |
| 2 position/10 port valve head, 1300 bar (p/n 5067-4240) | 5068-0205 | 5068-0206 | 10-32 | - | | G7116B |
| 2 position/10 port valve head, 600 bar, preparative scale (p/n 5067-4193) | 5068-0153 | 5068-0152 | 10-32 | - | | |
| 2 position/6 port valve head, 800 bar (p/n 5067-4282) | 0101-1409 | 0101-1417 | 10-32 | - | | |
| 2 position/10 port valve head, 800 bar (p/n 5067-4283) | 0101-1415 | 5068-0165 | 10-32 | - | | |
| Multi-position Selection Valves | | | | | | |
| 6-column selector valve head, 600 bar (p/n 5067-4146) | 5068-0076 | 5068-0077 | M4 | - | | |
| 6-column selector valve head, 800 bar (p/n 5067-4284) | 5068-0298 | 5068-0241 | M4 | | | |
| 6-column selector valve head, 1200 bar (p/n 5067-4142) | 5068-0067 | 5068-0077 | M4 | - | | |
| 6-column selector valve head, 1300 bar (p/n 5067-4273) | 5068-0242 | 5068-0241 | M4 | | | G7116B |
| 4-column selector valve head, 600 bar (p/n 5067-4287) | 5068-0264 | 5068-0263 | M4 | - | | G7116A/B |
| 4-column selector valve head, 800 bar (p/n 5067-4279) | 5068-0264 | 5068-0263 | M4 | | | |
| 8-column selector valve head, 1300 bar (p/n 5067-4233) | 5068-0200 | 5068-0199 | M4 | - | | G7116B |
| 8 position/9 port valve head, 600 bar (p/n 5067-4107) | 5067-4111 | 5068-0001 | 10-32 | 5068-0120 | | |
| 8 position/9 port valve head, 1200 bar (p/n 5067-4121) | 5068-0002 | 5068-0001 | 10-32 | 5068-0120 | | |
| 8 position/9 port valve head, 600 bar, preparative scale (p/n 5067-4194) | 5068-0155 | 5068-0154 | 10-32 | 5068-0120 | | |

(Continued)



Valve head, 2 position/6 port,
600 bar, 5067-4137



6-Column selector valve head,
1200 bar, 5067-4142 on G1170A
1290 Infinity Valve Drive



Valve head 8 position/18port 1300 bar,
5067-4233

InfinityLab Quick Change Valve Supplies

Quick Change valve heads can be used with G1316C, G1170A, G4227A, G7116A/B modules

| Description | Rotor Seal | Stator Head | Port Size | Stator Ring | Stator Face | Comments |
|--|------------|-------------|-----------|-------------|-------------|-----------------------------|
| Special Solution Valves | | | | | | |
| 2D-LC valve head, 1200 bar | 5068-0186 | 5068-0115 | 10-32 | 5068-0120 | | |
| 2D-LC valve head, 1300 bar | 5068-0214 | 5068-0115 | 10-32 | - | | Bearing ring p/n 1535- 4045 |
| 2D-LC active flow modulation valve, 1300 bar | 5068-0240 | 5068-0239 | 10-32/M4 | - | | Bearing ring NA |
| Stream selector valve, 600 bar | 5068-0183 | 5068-0124 | 10-32 | - | | |
| Stream selector valve, 1200 bar | 5068-0125 | 5068-0124 | 10-32 | - | | |
| Bio-inert Valves | | | | | | |
| 2 position/6 port valve head, 600 bar, bio-inert (p/n 5067-4148) | 0101-1409 | 5068-0060 | 10-32 | 5068-0120 | 0100-1851 | |
| 2 position/10 port valve head, 600 bar, bio-inert (p/n 5067-4132) | 5068-0041 | 5068-0040 | 10-32 | - | 5068-0095 | |
| 4-column selector valve head, 600 bar, bio-inert (p/n 5067-4134) | 5068-0045 | 5068-0044 | 10-32 | - | 5068-0093 | |
| 12 position/13 port bio-inert solvent selector valve head, 200 bar (p/n 5067-4159) | 0101-1288 | 5068-0097 | 10-32 | - | 0101-1288 | |

Note: Bearing ring for all Quick Change valve heads, p/n 1534-4045

Information on the valve supported fitting type

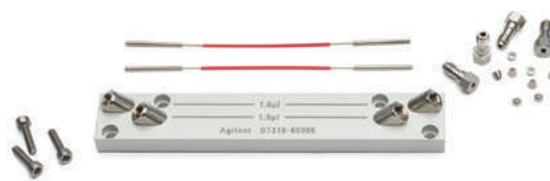
| Key | Description |
|-------|---|
| M4 | Metric M4 (M) fittings |
| 10-32 | Supports standard Swagelok fittings, for example: S, SL, SX, and Quick Turn |

Column Switching Valves and Capillary Kits

| Valve Type | Supported Fitting Type | Available Capillary Kits | Part No. |
|--|------------------------|--|-----------|
| For G1316A/B Thermostatted Column Compartment | | | |
| 2 position/6 port column switching valve | 10-32 | Capillary kit, 0.17 mm id, 2 position/6 port, G1316C | 5067-4730 |
| 2 position/10 port column regeneration valve | | | |
| For G1316C Thermostatted Column Compartment | | | |
| 2 position/6 port valve head | 10-32 | Capillary kit, 0.12 mm id, 2 position/6 port, with low dispersion heat exchanger double | 5067-4250 |
| | | Capillary kit, 0.17 mm id, 2 position/6 port, G1316C | 5067-4730 |
| 2 position/10 port micro valve head | M4 | Capillary kit, 0.12 mm id, 2 position/10 port, G1316C, micro valve | 5067-4800 |
| | | Capillary kit, 0.17 mm id, 2 position/10 port, G1316C, micro valve | 5067-5103 |
| 2 position/10 port valve head | 10-32 | Capillary kit, 0.12 mm id, 2 position/10 port, with low dispersion heat exchanger double | 5067-4252 |
| | | Capillary kit, 0.17 mm id, 2 position/6 port, G1316C | 5067-4730 |
| 2 position/10 port valve head, preparative scale | 10-32 | No kit available | |
| 6-Column selector valve head | M4 | Capillary kit, 0.17 mm id, 6 position/14 port valve | 5067-4234 |
| | | Capillary kit, 0.12 mm id, 6-Column selector, G1316C | 5067-6187 |
| 2 position/6 port valve head, bio-inert | 10-32 | Capillary kit, 0.17 mm id, 2 position/6 port, 600 bar, bio-inert | 5067-4767 |
| 2 position/10 port valve head, bio-inert | 10-32 | Capillary kit, 0.17 mm id, 2 position/10 port, 600 bar, bio-inert | 5067-5419 |
| 4-Column selector valve head, bio-inert | 10-32 | Capillary kit, 0.17 mm id, 4-Column selector, 600 bar, bio-inert | 5067-4769 |
| For G7116A/B Multicolumn Thermostat | | | |
| 2 position/6 port valve head | 10-32 | Capillary kit, 0.12 mm id, 2 position/6 port, with Quick-Connect heat exchanger | 5067-4249 |
| | | Capillary kit, 0.17 mm id, 2 position/6 port, with Quick-Connect heat exchanger | 5067-6597 |
| 2 position/10 port valve head | 10-32 | Capillary kit, 0.12 mm id, 2 position/10 port, with Quick-Connect heat exchanger | 5067-4251 |
| | | Capillary kit, 0.17 mm id, 2 position/10 port, with Quick-Connect heat exchanger | 5067-6598 |
| 4-column selector valve head | M4 | Capillary kit, 0.12 mm id, 4-column, with Quick-Connect heat exchanger | 5067-6596 |
| | | Capillary kit, 0.17 mm id, 4-column, with Quick-Connect heat exchanger | 5067-4300 |
| 6-Column selector valve head (G7116B) | M4 | Capillary kit, 0.12 mm id, 6-column selector, with Quick-Connect heat exchanger | 5067-4270 |
| 8-Column selector valve head (G7116B) | M4 | Capillary kit, 0.12 mm id, 8-column selector, with Quick-Connect heat exchanger | 5067-4248 |
| 2 position/6 port valve head, bio-inert | 10-32 | Capillary kit, 0.17 mm id, 2 position/6 port, 600 bar, bio-inert | 5067-4767 |
| 2 position/10 port valve head, bio-inert | 10-32 | Capillary kit, 0.17 mm id, 2 position/10 port, 600 bar, bio-inert | 5067-5419 |
| 4-Column selector valve head, bio-inert | 10-32 | Capillary kit, 0.17 mm id, 4-Column selector, 600 bar, bio-inert | 5067-4769 |
| G1170A Infinity Valve Drive | | | |
| 2 position/6 port valve head | 10-32 | Capillary kit, 0.17 mm id, for column selection with ICC in G7129A/B | 5067-6707 |
| | | Capillary kit, 0.12 mm id, for column selection with ICC in G7129A/B | 5067-6706 |

Information on the valve supported fitting type

| Key | Description |
|-------|---|
| M4 | Metric M4 (M) fittings |
| 10-32 | Supports standard Swagelok fittings, for example: S, SL, SX, and Quick Turn |



Low dispersion heat exchanger double kit for G1316B/C, G1316-80022

Capillary Kit Contents

Capillary Kit Contents

| Description | Quantity | Connection | Part No. | Replacement Part* |
|---|----------|--|------------------|-------------------|
| Capillary kit, 0.12 mm, 2 position/6 port valve, LDHE double, G1316C | | | 5067-4250 | |
| LD-precolum heat exchanger double-assembly | 1 | | G1316-80022 | |
| Capillary, stainless steel, 0.12 x 340 mm, S/SX | 1 | Autosampler to valve | 5067-4647 | |
| Capillary, stainless steel, 0.17 x 700 mm, S/SX | 1 | Pump to valve (automatted column regeneration) | 5067-4648 | |
| Capillary, stainless steel, 0.12 x 90 mm, S/SX | 2 | Valve to heat exchanger | 5067-4649 | |
| Capillary, stainless steel, 0.12 x 150 mm, SL/SX | 2 | Short column to valve | 5067-4650 | |
| Capillary, stainless steel, 0.12 x 280 mm, SL/SX | 2 | Long column to valve | 5067-4651 | |
| Capillary, stainless steel, 0.12 x 120 mm, SX/SX | 1 | Valve to valve (bypass) | 5067-4652 | |
| Capillary, stainless steel, 0.12 x 200 mm, S/SX | 1 | Valve to detector | 5067-4653 | |
| Fitting, male PEEK, 2/pk | 1 | Waste line | 0100-1516 | |
| Tube, PTFE, 2 m | 1 | Valve to waste | 0890-1713 | 5062-2462 (5 m) |
| Column clip set, eight colors | 1 | | 5042-9918 | |
| Capillary kit, 0.17 mm, 2 position/10 port valve, G1316C | | | 5067-4730 | |
| Capillary, stainless steel, 0.17 x 700 mm, S/SX | 1 | Pump to valve (automatted column regeneration) | 5067-4648 | |
| Capillary, stainless steel, 0.17 x 120 mm, SX/SX | 1 | Valve to valve (bypass) | 5067-4719 | |
| Capillary, stainless steel, 0.17 x 150 mm, SL/SX | 2 | Short column to valve | 5067-4720 | |
| Capillary, stainless steel, 0.17 x 200 mm, S/SX | 1 | Valve to detector | 5067-4721 | |
| Capillary, stainless steel, 0.17 x 280 mm, SL/SX | 2 | Long column to valve | 5067-4722 | |
| Capillary, stainless steel, 0.17 x 340 mm, S/SX | 1 | Autosampler to valve | 5067-4723 | |
| Capillary, stainless steel, 0.17 x 90 mm, S/SX | 4 | Valve to heat exchanger and heat exchanger to column | 5067-4724 | |
| Column clip set, eight colors | 1 | | 5042-9918 | |
| Tube, PTFE, 2 m | 1 | Valve to waste | 0890-1713 | 5062-2462 (5 m) |

(Continued)

| Fitting Left/Fitting Right | | | |
|----------------------------|----------------------------|-----|--------------------|
| Key | Description | Key | Description |
| W | Swagelok + 0.8 mm port id | H | Long head |
| S | Swagelok + 1.6 mm port id | G | Small head SW 4 mm |
| M | Metric M4 + 0.8 mm port id | N | Small head SW 5 mm |
| E | Metric M3 + 1.6 mm port id | F | Finger-tight |
| U | Female Swagelok union | V | 1200 bar |
| L | Long | B | Bio |
| X | Extra long | P | PEEK |

Capillary Kit Contents

| Description | Quantity | Connection | Part No. | Replacement Part* |
|---|----------|--|-------------------|-------------------|
| Capillary kit, 0.12 mm, 2 position/10 port micro valve, G1316C | | | 5067-4800 | |
| Capillary, stainless steel, 0.12 x 340 mm, SL/M | 1 | Autosampler to valve | 5067-4744 | |
| Capillary, stainless steel, 0.17 x 700 mm, SL/M | 1 | Pump to valve (automatted column regeneration) | 5067-5120 | |
| Capillary, stainless steel, 0.12 x 90 mm, SL/M | 2 | Valve to heat exchanger | 5067-5106 | |
| Capillary, stainless steel, 0.12 x 150 mm, SV/M | 2 | Short column to valve | 5067-5104 | |
| Capillary, stainless steel, 0.12 x 280 mm, SV/M | 1 | Long column to valve | 5067-5107 | |
| Capillary, stainless steel, 0.17 x 150 mm, M/M | 1 | Valve to valve (bypass) | 5067-4737 | |
| Capillary, stainless steel, 0.12 x 250 mm, SV/M | 1 | Valve to detector | 5067-4746 | |
| Tubing, PEEK, 0.03 inch od, 0.4 mm id, 450 mm | 2 | Waste line | 5022-6503 | |
| Fitting, PEEK | 2 | Valve to waste/waste line | G4240-43200 (x 2) | |
| Column clip set, eight colors | 1 | | 5042-9918 | |
| Fitting holder assembly | 2 | | G1316-68706 (x 2) | |
| Heat exchanger, long-up, 1.6 µL | 1 | | G1316-80002 | |
| Heat exchanger, long-down, 1.6 µL | 1 | | G1316-80003 | |
| Carrier for heat exchanger TCC SL Plus | 1 | | G1316-89200 (x 2) | |
| Capillary kit, 0.17 mm, 2 position/10 port micro valve, G1316C | | | 5067-5103 | |
| Capillary, stainless steel, 0.17 x 340 mm, SL/M | 1 | Autosampler to valve | 5067-5108 | |
| Capillary, stainless steel, 0.17 x 700 mm, SL/M | 1 | Pump to valve (automatted column regeneration) | 5067-5120 | |
| Capillary, stainless steel, 0.17 x 90 mm, SL/M | 2 | Valve to heat exchanger | 5067-5109 | |
| Capillary, stainless steel, 0.17 x 90 mm, SV/M | 2 | Heat exchanger to column | 5067-5110 | |
| Capillary, stainless steel, 0.17 x 150 mm, SV/M | 2 | Short column to valve | 5067-5111 | |
| Capillary, stainless steel, 0.17 x 280 mm, SV/M | 2 | Long column to valve | 5067-5112 | |
| Capillary, stainless steel, 0.17 x 150 mm, M/M | 1 | Valve to valve (bypass) | 5067-4737 | |
| Capillary, stainless steel, 0.17 x 250 mm, SL/M | 1 | Valve to detector | 5067-5113 | |
| Tubing, PEEK, 0.03 inch od, 0.4 mm id, 450 mm | 2 | Valve to waste | 5022-6503 | |
| Fitting, PEEK | 1 | | G4240-43200 (x 2) | |
| Column clip set, eight colors | 1 | | 5042-9918 | |

(Continued)

| Fitting Left/Fitting Right | | | |
|-----------------------------------|----------------------------|-----|--------------------|
| Key | Description | Key | Description |
| W | Swagelok + 0.8 mm port id | H | Long head |
| S | Swagelok + 1.6 mm port id | G | Small head SW 4 mm |
| M | Metric M4 + 0.8 mm port id | N | Small head SW 5 mm |
| E | Metric M3 + 1.6 mm port id | F | Finger-tight |
| U | Female Swagelok union | V | 1200 bar |
| L | Long | B | Bio |
| X | Extra long | P | PEEK |

Capillary Kit Contents

| Description | Quantity | Connection | Part No. | Replacement Part* |
|--|-----------------|--|------------------|--------------------------|
| Capillary kit, 0.12 mm, 2 position/10 port valve, LDHE double, G1316C | | | 5067-4252 | |
| Capillary, stainless steel, 0.12 x 340 mm, S/SX | 1 | Autosampler to valve | 5067-4684 | |
| Capillary, stainless steel, 0.17 x 700 mm, S/SX | 1 | Pump to valve (automatted column regeneration) | 5067-4648 | |
| Capillary, stainless steel, 0.12 x 90 mm, S/SX | 2 | Valve to heat exchanger | 5067-4685 | |
| Capillary, stainless steel, 0.12 x 150 mm, SX/SX | 2 | Short column to valve | 5067-4686 | |
| Capillary, stainless steel, 0.12 x 280 mm, SX/SX | 2 | Long column to valve | 5067-4687 | |
| Capillary, stainless steel, 0.12 x 120 mm, SX/SX | 1 | Valve to valve (bypass) | 5067-4688 | |
| Capillary, stainless steel, 0.12 x 200 mm, S/SX | 1 | Valve to detector | 5067-4689 | |
| Fitting, male, PEEK, 2/pk | 1 | | 0100-1516 | |
| Tube, PTFE, 2 m | 1 | Valve to waste | 0890-1713 | 5062-2462 (5 m) |
| Column clip set, eight colors | 1 | | 5042-9918 | |
| Capillary kit, 0.17 mm, 6-column selector valve, LDHE double, G1316C | | | 5067-4234 | |
| Capillary, stainless steel, 0.17 x 340 mm, SL/M | 1 | Autosampler to TCC heater | 5067-5108 | |
| Capillary, stainless steel, 0.17 x 250 mm, SL/M | 2 | Heater to valve, valve to detector | 5067-5113 | |
| Capillary, stainless steel, 0.17 x 280 mm, SV/M | 4 | Valve to column | 5067-5112 | |
| Capillary, stainless steel, 0.17 x 150 mm, SV/M | 4 | Column to valve | 5067-5111 | |
| Capillary, stainless steel, 0.17 x 150 mm, M/M | 1 | Valve to valve (bypass) | 5067-4737 | |
| Waste tube | 1 | | G1375-87326 | |
| Hex driver, SW-4, slitted | 1 | | 5023-2504 | |
| Column clip set, eight colors | 1 | | 5042-9918 | |
| M4 blank nut | 2 | | 5067-6141 | |

(Continued)

| Fitting Left/Fitting Right | | | |
|-----------------------------------|----------------------------|------------|--------------------|
| Key | Description | Key | Description |
| W | Swagelok + 0.8 mm port id | H | Long head |
| S | Swagelok + 1.6 mm port id | G | Small head SW 4 mm |
| M | Metric M4 + 0.8 mm port id | N | Small head SW 5 mm |
| E | Metric M3 + 1.6 mm port id | F | Finger-tight |
| U | Female Swagelok union | V | 1200 bar |
| L | Long | B | Bio |
| X | Extra long | P | PEEK |

Capillary Kit Contents

| Description | Quantity | Connection | Part No. | Replacement Part* |
|---|----------|--|------------------|-------------------|
| Capillary kit, 0.12 mm, 6-column selector valve, LDHE double, G1316C | | | 5067-6187 | |
| LD-Precolumn heatexchanger double assembly | 2 | | G1316-80022 | |
| Capillary, stainless steel, 0.12 x 130 mm, M4 PS-NS LS | 8 | Valve to heat exchanger, column to valve | 5500-1200 | |
| Capillary, stainless steel, 0.17 x 150 mm, M/M | 1 | Valve to valve (bypass) | 5067-4737 | |
| Capillary, stainless steel, 0.12 x 340 mm, SL/M | 1 | Autosampler to valve | 5067-4744 | |
| Capillary, stainless steel, 0.12 x 500 mm, M4-SL PS-PS | 1 | Autosampler (dual stack) to valve | 5500-1202 | |
| Capillary, stainless steel, 0.12 x 280 mm, M4-SL PS-PS | 1 | Valve to detector | 5500-1203 | |
| Column clip set, eight colors | 1 | | 5042-9918 | |
| Hex driver, SW-4, slitted | 1 | | 5023-2504 | |
| Waste tube | 1 | | G1375-87326 | |
| M4 blank nut | 2 | | 5067-6141 | |
| Capillary kit, 0.17 mm, 2 position/6 ports, 600 bar, bio-inert, G1316C, G7116A/B | | | 5067-4767 | |
| Capillary, PEEK/stainless steel, 0.17 x 400 mm, RLO/RLO, bio-inert | 1 | Sampler to valve | G5667-81004 | |
| Capillary, PEEK/stainless steel, 0.17 x 300 mm, RLO/RLO, bio-inert | 2 | Valve to column | G5667-81003 | |
| Tubing, PEEK, 1.6 mm od, 0.18 mm id, 1.5 m | 1 | | 0890-1763 | |
| Fitting holder assembly | 2 | | G1316-68706 | |
| Fingertight fitting, long | 1 | | 5062-8541 | |
| Column holder clips (lamella type), 2/pk | 1 | | G7116-68003 | |
| Tubing, flex, 2 m | 1 | | 0890-1713 | 5062-2462 (5 m) |
| Plastic fittings | 4 | | 0100-1259 | |

(Continued)

| Fitting Left/Fitting Right | | | |
|-----------------------------------|----------------------------|-----|--------------------|
| Key | Description | Key | Description |
| W | Swagelok + 0.8 mm port id | H | Long head |
| S | Swagelok + 1.6 mm port id | G | Small head SW 4 mm |
| M | Metric M4 + 0.8 mm port id | N | Small head SW 5 mm |
| E | Metric M3 + 1.6 mm port id | F | Finger-tight |
| U | Female Swagelok union | V | 1200 bar |
| L | Long | B | Bio |
| X | Extra long | P | PEEK |

Capillary Kit Contents

| Description | Quantity | Connection | Part No. | Replacement Part* |
|--|-----------------|--------------------------------|------------------|---------------------------------|
| Capillary kit, 0.17 mm, 2 position/10 ports, 600 bar, bio-inert, G1316C, G7116A/B | | | 5067-5419 | |
| Capillary, titanium, 700 x 0.17 mm id | 1 | Regeneration pump to the valve | G5611-60501 | |
| Capillary, PEEK/stainless steel, 0.17 x 300 mm, RLO/RLO, bio-inert | 2 | Valve to column inlet | G5667-81003 | |
| Capillary, PEEK/stainless steel, 0.17 x 400 mm, RLO/RLO, bio-inert | 1 | Valve outlet to detector | G5667-81004 | |
| Tubing, flex, 2 m | 1 | Valve to waste | 0890-1713 | 5062-2462 (5 m) |
| Capillary, PEEK, 0.18 mm id, 1.5 m | 1 | | 0890-1763 | |
| Column holder clips (lamella type), 2/pk | 1 | | G7116-68003 | |
| Capillary kit, 0.17 mm, 4 column selector, 600 bar, bio-inert, G1316C, G7116A/B | | | 5067-4769 | |
| Capillary, PEEK/stainless steel, 0.17 x 300 mm, RLO/RLO, bio-inert | 2 | Valve to column inlet | G5667-81003 | |
| Capillary, PEEK/stainless steel, 0.17 x 400 mm, RLO/RLO, bio-inert | 1 | Sampler to Valve | G5667-81004 | |
| Capillary, PEEK, 0.18 mm id, 1.5 m | 1 | | 0890-1763 | |
| Column holder clips (lamella type) 2/pk | 1 | | G7116-68003 | |
| Fitting holder assembly | 2 | | G1316-68706 | |
| Fingertight fitting, long | 1 | | 5062-8541 | |
| Column holder clips (lamella type), 2/pk | 1 | | G7116-68003 | |
| Capillary kit, 0.12 mm, 2 position/6 port valve, QCHE, G7116B | | | 5067-4249 | |
| Heat exchanger assembly, 1.6 µL-Z | 1 | | G7116-60015 | |
| InfinityLab Quick Connect assembly, stainless steel, 0.12 x 105 mm | 1 | Heat exchanger to column | 5067-5957 | |
| Capillary, stainless steel, 0.12 x 90 mm, S/SX | 2 | Valve to heat exchanger | 5067-4649 | |
| Capillary, stainless steel, 0.12 x 150 mm | 2 | Column (short) to valve | 5500-1189 | |
| Capillary, stainless steel, 0.12 x 280 mm | 2 | Column (long) to valve | 5500-1191 | |
| Capillary, stainless steel, 0.12 x 200 mm, S/SX | 2 | Valve to detector | 5500-1209 | 5500-1190 (without fittings) |
| Tubing, flex, 2 m | 1 | Valve to waste | 0890-1713 | 5062-2462 (5 m) |
| Column holder clips (lamella type) 2/pk | 1 | | G7116-68003 | |

(Continued)

| Fitting Left/Fitting Right | | | |
|-----------------------------------|----------------------------|------------|--------------------|
| Key | Description | Key | Description |
| W | Swagelok + 0.8 mm port id | H | Long head |
| S | Swagelok + 1.6 mm port id | G | Small head SW 4 mm |
| M | Metric M4 + 0.8 mm port id | N | Small head SW 5 mm |
| E | Metric M3 + 1.6 mm port id | F | Finger-tight |
| U | Female Swagelok union | V | 1200 bar |
| L | Long | B | Bio |
| X | Extra long | P | PEEK |

Capillary Kit Contents

| Description | Quantity | Connection | Part No. | Replacement Part* |
|---|----------|---|------------------|---------------------------------|
| Capillary kit, 0.17 mm, 2 position/6 port valve, QCHE, G7116B | | | 5067-6597 | |
| Heat exchanger assembly, 1.6 µL-Z | 1 | | G7116-60015 | |
| Capillary, stainless steel, 0.17 x 105 mm, long socket | 4 | Heat exchanger to column, valve to heat exchanger | 5500-1193 | |
| Capillary, stainless steel, 0.12 x 150 mm, long socket | 2 | Column (short) to valve | 5500-1189 | |
| Capillary, stainless steel, 0.12 x 280 mm, long socket | 2 | Column (long) to valve | 5500-1191 | |
| Fittings, PEEK, 2/pk | 3 | Column outlet | 0100-1516 | |
| Stainless steel long fittings, 10/pk | 1 | | 5065-4454 | |
| Capillary, stainless steel, 0.12 x 280 mm, long socket | 1 | Valve to detector | 5500-1191 | |
| Capillary kit, 0.12 mm, 2 position/10 port valve, QCHE, G7116B | | | 5067-4251 | |
| Heat exchanger assembly, 1.6 µL-Z | 1 | | G7116-60015 | |
| InfinityLab Quick Connect assembly, stainless steel, 0.12 x 105 mm | 1 | Heat exchanger to column | 5067-5957 | |
| Capillary, stainless steel, 0.12 x 150 mm | 2 | Column (short) to valve | 5500-1189 | |
| Capillary, stainless steel, 0.12 x 280 mm | 2 | Column (long) to valve | 5500-1191 | |
| Capillary, stainless steel, 0.12 x 120 mm, SX/SX | 1 | Valve to valve bypass line | 5067-4688 | |
| Capillary, stainless steel, 0.12 x 200 mm, SX/S | 1 | Valve to detector | 5500-1209 | 5500-1190 (without fittings) |
| Capillary, stainless steel, 0.12 x 500 mm, SX/SX | 1 | ALS to valve | 5500-1210 | 5500-1192 (without fittings) |
| Capillary, stainless steel, 0.17 x 700 mm, S/SX | 1 | Pump to valve | 5067-4648 | |
| Capillary, stainless steel, 0.12 x 90 mm, S/SX | 2 | Valve to heat exchanger | 5067-4685 | |
| Tube, PTFE, 2 m | 1 | Waste line | 0890-1713 | 5062-2462 (5 m) |
| Column holder clips (lamella type), 2/pk | 2 | | G7116-68003 | |

(Continued)

| Fitting Left/Fitting Right | | | |
|-----------------------------------|----------------------------|-----|--------------------|
| Key | Description | Key | Description |
| W | Swagelok + 0.8 mm port id | H | Long head |
| S | Swagelok + 1.6 mm port id | G | Small head SW 4 mm |
| M | Metric M4 + 0.8 mm port id | N | Small head SW 5 mm |
| E | Metric M3 + 1.6 mm port id | F | Finger-tight |
| U | Female Swagelok union | V | 1200 bar |
| L | Long | B | Bio |
| X | Extra long | P | PEEK |

Capillary Kit Contents

| Description | Quantity | Connection | Part No. | Replacement Part* |
|---|-----------------|---|------------------|--------------------------|
| Capillary kit, 0.17 mm, 2 position/10 port valve, QCHE, G7116B | | | 5067-6598 | |
| Heat exchanger assembly, 1.6 µL-Z | 1 | | G7116-60015 | |
| Capillary, stainless steel, 0.17 x 105 mm | 4 | Heat exchanger to column, valve to heat exchanger | 5500-1193 | |
| Capillary, stainless steel, 0.12 x 150 mm | 2 | Column (short) to valve | 5500-1189 | |
| Capillary, stainless steel, 0.12 x 280 mm | 2 | Long column to valve | 5500-1191 | |
| Capillary, stainless steel, 0.17 x 120 mm, SL-SL | 1 | Bypass | 5067-4719 | |
| Fittings, PEEK, 2/pk | 3 | Column outlet | 0100-1516 | |
| Long fittings, stainless steel, 10/pk | 1 | | 5065-4454 | |
| Capillary, stainless steel, 0.12 x 280 mm | 1 | Valve to detector | 5500-1191 | |
| Tube, PTFE, 2 m | 1 | Waste line | 0890-1713 | 5062-2462 (5 m) |
| Column holder clips (lamella type), 2/pk | 2 | | G7116-68003 | |
| Capillary kit, 0.12 mm id, 6-column selector, QCHE, G7116B | | | 5067-4270 | |
| Heat exchanger assembly, 1.6 µL-Z | 6 | | G7116-60015 | |
| Capillary, stainless steel, 0.12 x 105 mm, SL PS-LS | 6 | Heat exchanger to column | 5500-1201 | |
| Capillary, stainless steel, 0.12 x 130 mm, M4-SL PS-PS | 6 | Valve to heat exchanger | 5500-1199 | |
| Capillary, stainless steel, 0.12 x 130 mm, M4 PS-NS LS | 6 | Column to valve | 5500-1200 | |
| Fittings, PEEK, 10/pk | 1 | Column outlet fitting | 5063-6591 | |
| Capillary, stainless steel, 0.12 x 500 mm, M4-SL PS-PS | 1 | Autosampler to valve | 5500-1202 | |
| Capillary, stainless steel, 0.12 x 280 mm, M4-SL PS-PS | 1 | Valve to detector | 5500-1203 | |
| Capillary, stainless steel, 0.12 x 150 mm, M4-M4 PS-PS | 1 | Valve to valve (bypass) | 5500-1204 | |
| Waste tube, including fitting | 1 | | G1375-87326 | |
| M4 blank nut | 2 | | 5067-6141 | |
| Column holder clamp, for Infinity II, 2/pk | 6 | | G7116-68004 | |

(Continued)

| Fitting Left/Fitting Right | | | |
|-----------------------------------|----------------------------|------------|--------------------|
| Key | Description | Key | Description |
| W | Swagelok + 0.8 mm port id | H | Long head |
| S | Swagelok + 1.6 mm port id | G | Small head SW 4 mm |
| M | Metric M4 + 0.8 mm port id | N | Small head SW 5 mm |
| E | Metric M3 + 1.6 mm port id | F | Finger-tight |
| U | Female Swagelok union | V | 1200 bar |
| L | Long | B | Bio |
| X | Extra long | P | PEEK |

Capillary Kit Contents

| Description | Quantity | Connection | Part No. | Replacement Part* |
|--|----------|----------------------------------|------------------|-------------------|
| Capillary kit, 0.12 mm, 8-column selector, QCHE, G7116B | | | 5067-4248 | |
| Heat exchanger assembly, 1.6 µL-Z | 8 | | G7116-60015 | |
| Capillary, stainless steel, 0.12 x 500 mm, M4-SL PS-PS | 1 | Autosampler to valve | 5500-1202 | |
| Capillary, stainless steel, 0.12 x 130 mm, M4-SL PS-PS | 8 | Valve to heat exchanger | 5500-1199 | |
| Capillary, stainless steel, 0.12 x 130 mm, M4 P S-NS LS | 8 | Column to valve | 5500-1200 | |
| Fittings, PEEK, 10/pk | 1 | Column outlet | 5063-6591 | |
| Capillary, stainless steel, 0.12 x 105 mm, SL PS-LS | 8 | Heat exchanger (PS-SL) to column | 5500-1201 | |
| Capillary, stainless steel, 0.12 x 280 mm, M4-SL PS-PS | 1 | Valve to detector | 5500-1203 | |
| Capillary, stainless steel, 0.12 x 150 mm, M4-M4 PS-PS | 1 | Valve to valve (column bypass) | 5500-1204 | |
| Waste tube, including M4 PEEK fitting | 1 | | G1375-87326 | |
| M4 Blank nut | 3 | | 5067-6141 | |
| Column holder clips (lamella type), 2/pk | 8 | | G7116-68003 | |
| Hex driver, SW-4 slitted | 1 | Tool for M4 fittings | 5023-2504 | |
| Capillary kit, 0.12 mm, 4-column selector, QCHE, G7116A | | | 5067-6596 | |
| Heat exchanger assembly, 1.6 µL-Z | 4 | | G7116-60015 | |
| Capillary, stainless steel, 0.12 x 500 mm, M4-SL PS-PS | 1 | Autosampler to valve | 5500-1202 | |
| Capillary, stainless steel, 0.12 x 130 mm, M4-SL PS-PS | 4 | Valve to heat exchanger | 5500-1199 | |
| Capillary, stainless steel, 0.12 x 130 mm, M4 PS-NS LS | 4 | Column to valve | 5500-1200 | |
| Fittings, PEEK, 10/pk | 1 | Column outlet | 5063-6591 | |
| Capillary, stainless steel, 0.12 x 105 mm, SL PS-LS | 4 | Heat exchanger (PS-SL) to column | 5500-1201 | |
| Capillary, stainless steel, 0.12 x 280 mm, M4-SL PS-PS | 1 | Valve to detector | 5500-1203 | |

(Continued)

| Fitting Left/Fitting Right | | | |
|-----------------------------------|----------------------------|-----|--------------------|
| Key | Description | Key | Description |
| W | Swagelok + 0.8 mm port id | H | Long head |
| S | Swagelok + 1.6 mm port id | G | Small head SW 4 mm |
| M | Metric M4 + 0.8 mm port id | N | Small head SW 5 mm |
| E | Metric M3 + 1.6 mm port id | F | Finger-tight |
| U | Female Swagelok union | V | 1200 bar |
| L | Long | B | Bio |
| X | Extra long | P | PEEK |

Capillary Kit Contents

| Description | Quantity | Connection | Part No. | Replacement Part* |
|--|-----------------|--------------------------------|------------------|--------------------------|
| Capillary, stainless steel, 0.12 x 150 mm, M4-M4 PS-PS | 1 | Valve to valve (column bypass) | 5500-1204 | |
| Waste tube, including M4 PEEK fitting | 1 | | G1375-87326 | |
| M4 blank nut | 3 | | 5067-6141 | |
| Column holder clips (lamella type), 2/pk | 1 | | G7116-68003 | |
| Hex driver SW-4 slitted | 1 | Tool for M4 fittings | 5023-2504 | |
| Capillary kit, 0.17 mm, 4-column selector, QCHE, G7116A | | | 5067-4300 | |
| Heat exchanger assembly, 1.6 µL-Z | 4 | | G7116-60051 | |
| Column holder clips (lamella type) 2/pk | 4 | | G7116-68003 | |
| Capillary, stainless steel, 0.17 mm x 500 mm, SL-M4 PS-PS | 1 | Autosampler to valve | 5067-6188 | |
| Capillary, stainless steel, 0.17 mm x 90 mm, SL/M | 4 | Valve to heat exchanger | 5067-5109 | |
| Capillary, stainless steel, 0.12 mm x 250 mm, SV/M | 4 | Long column to valve | 5067-4746 | |
| Capillary, stainless steel, 0.12 mm x 130 mm, SL/M | 4 | Short column to valve | 5500-1200 | |
| Fitting, male, PEEK, 2/pk | 2 | Column outlet | 0100-1516 | |
| Fitting, stainless steel, long, SL | 4 | | G1314-68703 | 5065-4454 (10/pk) |
| Capillary, stainless steel, 0.17 mm x 105 mm | 4 | Heat exchanger to column | 5500-1193 | |
| Capillary, stainless steel, 0.12 mm x 280 mm, M4-SL PS-PS | 1 | Valve to detector | 5500-1203 | |
| Capillary, stainless steel, 0.12 mm x 150 mm, M4-M4 PS-PS | 1 | Valve to valve (column bypass) | 5500-1204 | |
| Fitting screw, long, 10/pk | 1 | | 5065-4454 | |
| Hex driver, SW-4 slitted | 1 | Tool for M4 fittings | 5023-2504 | |
| M4 blank nut | 3 | | 5067-6141 | |
| Waste tube, including M4 PEEK fitting | 1 | | G1375-87326 | |

(Continued)

| Fitting Left/Fitting Right | | | |
|-----------------------------------|----------------------------|------------|--------------------|
| Key | Description | Key | Description |
| W | Swagelok + 0.8 mm port id | H | Long head |
| S | Swagelok + 1.6 mm port id | G | Small head SW 4 mm |
| M | Metric M4 + 0.8 mm port id | N | Small head SW 5 mm |
| E | Metric M3 + 1.6 mm port id | F | Finger-tight |
| U | Female Swagelok union | V | 1200 bar |
| L | Long | B | Bio |
| X | Extra long | P | PEEK |

Capillary Kit Contents

| Description | Quantity | Connection | Part No. | Replacement Part* |
|---|----------|--|------------------|-------------------|
| Capillary kit, 0.17 mm column select** ICC, 2 position/6 port valve, G1170A | | | 5067-6707 | |
| Capillary, stainless steel, 0.17 mm x 400 mm, long socket | 3 | Vialsampler to valve (x 1), valve to ICC (x 2) | 5500-1236 | |
| Quick Connect fitting assembly, 0.17 mm x 105 mm | 2 | ICC to column | 5067-6166 | |
| Capillary, stainless steel, 0.12 x 500 mm, long socket | 2 | Column to valve | 5500-1192 | |
| Quick Turn fitting | 2 | Column outlet | 5067-5966 | |
| Capillary, stainless steel, 0.12 x 400 mm, SL/SL, long socket | 1 | Valve to detector | 5500-1251 | |
| Long fittings and ferrules, stainless steel, 10/pk | 1 | | 5065-4454 | |
| Capillary kit, 0.12 mm column select*** ICC, 2 position/6 port valve, G1170A | | | 5067-6708 | |
| Capillary, stainless steel, 0.17 x 400 mm, long socket | 3 | Vialsampler to valve (x 1), valve to ICC (x 2) | 5500-1251 | |
| Quick Connect fitting assembly, 0.17 x 105 mm | 2 | ICC to column | 5067-5957 | |
| Capillary, stainless steel, 0.12 x 500 mm, long socket | 2 | Column to valve | 5500-1192 | |
| Quick Turn fitting | 2 | Column outlet | 5067-5966 | |
| Capillary, stainless steel, 0.12 x 400 mm, SL/SL, long socket | 1 | Valve to detector | 5500-1251 | |
| Long fittings and ferrules, stainless steel, 10/pk | 1 | | 5065-4454 | |

*Products with replacement parts are available as part of a kit, but are not available for individual purchase.

** Dual column selection for vialsampler and external 2 position/6 port valve

*** Dual column selection for vialsampler and external valve

| Fitting Left/Fitting Right | | | |
|-----------------------------------|----------------------------|-----|--------------------|
| Key | Description | Key | Description |
| W | Swagelok + 0.8 mm port id | H | Long head |
| S | Swagelok + 1.6 mm port id | G | Small head SW 4 mm |
| M | Metric M4 + 0.8 mm port id | N | Small head SW 5 mm |
| E | Metric M3 + 1.6 mm port id | F | Finger-tight |
| U | Female Swagelok union | V | 1200 bar |
| L | Long | B | Bio |
| X | Extra long | P | PEEK |



7725i manual injection valve, 5063-6502

Manual Injection Valves

Agilent provides the latest developments in LC injection technology from Rheodyne.

- Continuous flow path with “Make-Before-Break” design
- Sample capacity
- Choice of stainless steel or PEEK flowpath
- Easy access to fittings due to wide 30 ° port angles

Series 7725i and 9725i Analytical Injection Valves

Stainless steel (SST) 7725i and PEEK 9725i valves are the most popular injection valves for analytical HPLC. Features include:

- A 20 μ L loop (installed). Loops are also available in stainless steel or PEEK from 5 μ L to 5 mL (10 mL for PEEK)
- Make-Before-Break (MBB) technology allows switching without flow interruption
- Wide 30° port angles offer easier access to fittings
- Built-in position sensing switch provides the chromatograph with a reproducible start signal

Series 3725i-038 and 3725i Preparative Injection Valves

The series 3725i-038 (stainless steel) and 3725i (PEEK) are the most suitable manual valves for large sample volumes, high flow rates, and preparative columns sized 1.0-10 cm in diameter.

- Versatile ports accommodate 1/8 inch (3.2 mm) and 1/16 inch (1.6 mm) od tubing.
Note: 1/16 inch od tubing requires an adapter, p/n 5067-1503
- 1.0 mm diameter passages allow flow rates up to 800 mL/min with virtually no pressure drop
- Make-Before-Break technology allows switching without flow interruption
- High reproducibility for both partial-filling and complete-filling methods
- Sample range is 100 μ L to 20 mL (10 mL loop is installed)
- Flow range is 10 to 800 mL/min
- Built-in position sensing switch gives the chromatograph a reproducible start signal

Manual Injection Valves with Position Sensing Switches

| Description | Comments | Part No. | Rotor Seal Material | Rotor Seal | Stator Face | Stator Head | Bearing Ring | Isolation Seal | Repair Kit | Needle Port Adaptor |
|--|---------------------------------------|-----------|---------------------|------------|-------------|-------------|--------------|----------------|------------|---------------------|
| 2 position/ 6 port valve, 400 bar (7725i) | Analytical, G1328A/B | 5063-6502 | Tefzel | 0101-0620 | 0100-1859 | 0100-1860 | 1535-4045 | 1535-4046 | 0101-1254 | |
| | | | Vespel | 0101-0623 | | | | | | |
| | | | PEEK | 0101-1255 | | | | | | |
| 2 position/ 6 port valve, 600 bar (7725i) | Analytical, G1328C | 5067-4191 | PEEK | 5068-0052 | 0100-1859 | 5068-0053 | 1535-4045 | 1535-4046 | 0100-1859 | 0100-1859 |
| Manual injection valve, 400 bar (7725i), for 1120/1220 | 1120 | | PEEK | 5067-4105 | | 0100-1850 | | | | 5067-1581 |
| Manual injection valve, 600 bar (7725i) | Analytical for 1220 Infinity LC | 5067-4202 | PEEK | 5068-0082 | | 0101-1417 | 1535-4045 | | | 5067-1581 |
| Bio-inert 2 position/ 6 port manual injection valve (9725i) | Analytical, Bio-inert | 5067-4158 | PEEK | 5068-0082 | 0100-1851 | 5068-0060 | 1535-4045 | | | 5067-1581 |
| Manual injection valve, 400 bar (9725i) | Analytical | 0101-1253 | Tefzel | 0101-0620 | 0100-1859 | | | 1535-4046 | | |
| Manual prep injection valve, stainless steel (3725i) | Preparative | 0101-1232 | PEEK | 0101-1233 | | | | 1535-4046 | | |
| Manual prep injection valve, PEEK (7725i) | Preparative | 0101-1231 | PEEK | 0101-1233 | | | | 1535-4046 | | |



Manual Injection Valve Replacement Parts

Manual Injection Valve Sample Loops

The right mix of injection valve sample loops are available for your application needs. Agilent offers factory-cut and finished loops of the highest quality.

- Rotor seals wear with use and need routine replacement
- Stators only need replacement if the ports are damaged
- PEEK rotor seals are incompatible with concentrated nitric and sulfuric acids
- Stainless steel loops are square cut and free of burrs for a flush connection
- Flexible PEEK loops have a clean, straight cut for low dead volume connections

Stainless Steel Sample Loops

- Sample loops for Rheodyne 7725 Series and 7125 Series valves are not interchangeable due to the change in port angle
- Actual volumes can differ due to tolerance of metal tubing bore
- Accuracy of large metal loops is $\pm 5\%$, intermediate loops $\pm 10\%$, and small loops $\pm 30\%$

PEEK Sample Loops

- Inert to most organic solvents
- Wall thickness, temperature, exposure time, and concentration of organic solvents affect the durability of PEEK tubing
- Concentrated nitric acid and sulfuric acid weaken PEEK tubing
- THF, methylene chloride, and DMSO cause PEEK to swell
- Actual volumes can differ because of tolerance of tubing bore
- Accuracy of large PEEK loops is $\pm 14\%$, intermediate loops $\pm 21\%$, and small loops $\pm 65\%$

Manual Injection Valve Sample Loops

The right mix of injection valve sample loops are available for your application needs. Agilent offers factory-cut and finished loops of the highest quality.

- Stainless steel loops are square cut and free of burrs for a flush connection
- Flexible PEEK loops have a clean, straight cut for low dead volume connections

Manual Injection Valve Sample Loops

| Volume | id (mm) | Material | Use With | Part No. |
|-------------|---------|-----------------|------------|-----------|
| 5 μ L | 0.18 | Stainless steel | 7125, 7010 | 1535-4860 |
| | 0.18 | Stainless steel | 7725 | 0101-1248 |
| | 0.18 | PEEK | 9725 | 0101-1241 |
| 10 μ L | 0.30 | Stainless steel | 7125, 7010 | 0101-0376 |
| | 0.30 | Stainless steel | 7725 | 0100-1923 |
| | 0.25 | PEEK | 9725 | 0101-1240 |
| 20 μ L | 0.51 | Stainless steel | 7125, 7010 | 0101-0377 |
| | 0.30 | Stainless steel | 7725 | 0100-1922 |
| | 0.25 | PEEK | 9725 | 0101-1239 |
| 50 μ L | 0.51 | Stainless steel | 7125, 7010 | 0101-0378 |
| | 0.51 | Stainless steel | 7725 | 0100-1924 |
| | 0.51 | PEEK | 9725 | 0101-1238 |
| 100 μ L | 0.51 | Stainless steel | 7125, 7010 | 0101-0379 |
| | 0.51 | Stainless steel | 7725 | 0100-1921 |
| | 0.51 | PEEK | 9725 | 0101-1242 |
| 200 μ L | 0.76 | Stainless steel | 7125, 7010 | 0101-1252 |
| | 0.76 | Stainless steel | 7725 | 0101-1247 |
| | 0.51 | PEEK | 9725 | 0101-1237 |



Stainless steel sample loops

(Continued)



PEEK sample loops

Manual Injection Valve Sample Loops

| Volume | id (mm) | Material | Use With | Part No. |
|--------|---------|-----------------|------------|-----------|
| 500 µL | 0.76 | Stainless steel | 7125, 7010 | 0101-1251 |
| | 0.76 | Stainless steel | 7725 | 0101-1246 |
| | 0.76 | PEEK | 9725 | 0101-1236 |
| 1 mL | 0.76 | Stainless steel | 7125, 7010 | 0101-1219 |
| | 0.76 | Stainless steel | 7725 | 0101-1245 |
| | 0.76 | PEEK | 9725 | 0101-1235 |
| 2 mL | 1.00 | Stainless steel | 7125, 7010 | 0101-1250 |
| | 1.00 | Stainless steel | 7725 | 0101-1244 |
| | 0.76 | PEEK | 9725 | 0101-1234 |
| | 1.60 | PEEK | 3725 | 0101-1229 |
| 5 mL | 1.00 | Stainless steel | 7125, 7010 | 0101-1249 |
| | 1.00 | Stainless steel | 7725 | 0101-1243 |
| | 0.76 | PEEK | 9725 | 0101-1230 |
| | 1.60 | PEEK | 3725 | 0101-1228 |
| 10 mL | 2.00 | PEEK | 3725 | 0101-1227 |
| 20 mL | 2.00 | PEEK | 3725 | 0101-1226 |

Real stories from the lab.

17

TRUE STORY NO.
ASK THE EXPERT

A pharma lab in India was struggling to replicate a method transferred from a lab in the US. The CrossLab FSE helped them with a tip about their Agilent Infinity LC System.

Agilent
CrossLab
From Insight to Outcome

www.agilent.com/chem/story17

Syringes for Manual Injection

Agilent color-coded manual syringes allow you to determine syringe volume with one quick glance, so you can more efficiently perform manual dilution, extraction, and sample preparation. They also give you the advantages of:








- Improved scale readability with a new vertical syringe scale orientation for more intuitive use
- A wide selection of volumes, making Agilent your “one-stop” resource for all of your sample manipulation needs
- Accuracy within ± 1 % of nominal volume, and precision within 1 %, measured at 80 % of total scale volume
- Environmentally friendly cardboard and plastic packaging that could be recycled to help reduce landfill waste
- A Certificate of Conformance to ensure the highest quality construction and performance, available for viewing and printing anytime
- Lot-traceable for accurate identification

Of course, all Agilent syringes are backed by over 40 years of chromatography expertise, industry-leading technical support, and a 90-day warranty from the date of shipment.



LC Manual Syringes with Fitted Plungers

| Volume (μL) | Description | Unit | Needle | Part No. |
|-------------|--------------------------------------|------|------------------------|-----------|
| 5 | Fixed | 1/pk | 22 gauge/2 inch/LC tip | 5190-1480 |
| 10 | Fixed | 1/pk | 22 gauge/2 inch/LC tip | 5190-1484 |
| | Removable | 1/pk | 22 gauge/2 inch/LC tip | 5190-1485 |
| | Replacement needle for 10 μL syringe | 3/pk | | 5190-1486 |
| 25 | Fixed | 1/pk | 22 gauge/2 inch/LC tip | 5190-1494 |
| 50 | Fixed | 1/pk | 22 gauge/2 inch/LC tip | 5190-1501 |
| 100 | Fixed | 1/pk | 22 gauge/2 inch/LC tip | 5190-1508 |
| 250 | Fixed | 1/pk | 22 gauge/2 inch/LC tip | 5190-1515 |
| 500 | Fixed | 1/pk | 22 gauge/2 inch/LC tip | 5190-1522 |

| | | | | | | |
|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |
| 5.0 μL | 10 μL 1.0 mL | 25 μL 2.5 mL | 50 μL 5.0 mL | 100 μL 10.0 mL | 250 μL 25.0 mL | 500 μL 50.0 mL |

LC Manual Syringes with PTFE-Tipped Plungers

| Volume (μL) | Description | Unit | Needle | Part No. |
|--------------------|--|-------------|------------------------|-----------------|
| 10 | Syringe | | 22 gauge/2 inch/LC tip | 5190-1492 |
| | Replacement needle, for 10 μL syringe | 3/pk | | 5190-1486 |
| | Replacement plunger, with PTFE tip, for 10 μL syringe | | | 5190-1558 |
| 25 | Syringe | | 22 gauge/2 inch/LC tip | 5190-1499 |
| | Replacement needle | 3/pk | | 5190-1571 |
| | Replacement plunger, with PTFE tip, for 25 μL syringe | | | 5190-1560 |
| 50 | Syringe | | 22 gauge/2 inch/LC tip | 5190-1505 |
| | Replacement needle | 3/pk | | 5190-1571 |
| | Replacement plunger, with PTFE tip, for 50 μL syringe | | | 5190-1561 |
| 100 | Syringe | | 22 gauge/2 inch/LC tip | 5190-1512 |
| | Replacement needle | 3/pk | | 5190-1571 |
| | Replacement plunger, with PTFE tip, for 100 μL syringe | | | 5190-1562 |
| 250 | Syringe | | 22 gauge/2 inch/LC tip | 5190-1520 |
| | Replacement needle | 3/pk | | 5190-1571 |
| 500 | Syringe | | 22 gauge/2 inch/LC tip | 5190-1526 |
| | Replacement needle | 3/pk | | 5190-1571 |
| | Replacement plunger, with PTFE tip, for 500 μL syringe | | | 5190-1564 |

DETECTOR SUPPLIES

Long-life Deuterium Lamps

The reliability of your liquid chromatography can suffer when inferior lamps produce inconsistent intensity. Noisy baselines result in wasted troubleshooting time, while frequent lamp replacements can lead to higher long-term costs

What makes Agilent lamps so different?

- **Optimum performance**—rigorous testing for noise and drift specifications, correct operating voltage, light intensity, and proper alignment ensures best performance
- **Longer life**—long-life deuterium lamps provide 50 % longer lifetime for more than 2,000 hours of use, due to our improved coating process
- **Higher signal-to-noise ratio**—the narrower aperture is designed to provide increased light intensity, decreased noise and lower limits of detection
- **Higher analytical sensitivity**—by providing greater analytical sensitivity, long-life Deuterium lamps can extend detection capabilities and improve qualification at trace levels
- **Reduced downtime**—InfinityLab lamps with RFID provide critical information and full usage traceability for planned maintenance, easier troubleshooting and lower cost of ownership

Manufactured in an ISO 9001 certified environment, Agilent lamps are rigorously tested and fully traceable throughout every step of the production process.



TIPS & TOOLS

Designed to deliver

Learn more about long-life deuterium lamps at

www.agilent.com/chem/lamps



InfinityLab long-life HiS deuterium lamp, with RFID tag, 2140-0820



Long-life deuterium lamp, G1314-60100



InfinityLab long-life HiS deuterium lamp, 5190-0917



Long-life deuterium lamp, 5182-1530



Tungsten lamp assembly, G1103-60001

Detector Lamps

| Description | Used in | Part No. |
|--|--|-------------|
| Variable Wavelength Detector | | |
| InfinityLab long-life HiS deuterium lamp with RFID tag | For G1314D/E/F and G7114A/B | G1314-60101 |
| Long-life deuterium lamp | For G1314A/B/C, 1120 and 1220 Infinity LC with VWD | G1314-60100 |
| Diode Array Detector/Multiple Wavelength Detector | | |
| InfinityLab long-life HiS deuterium lamp (8pin), with RFID tag | For G4212A/B and G7117A/B/C | 5190-0917 |
| InfinityLab long-life deuterium lamp, with RFID tag | For G1315C/D, G1365C/D, G7115A, G7165A | 2140-0820 |
| Long-life deuterium lamp | For G1315A/B and G1365A/B | 5182-1530 |
| Tungsten lamp (for VIS) assembly | For G1315A/B/C/D and G1365A/B/C/D | G1103-60001 |
| Long-life deuterium lamp | For G9309A | 110715400 |



Variable Wavelength Detector (VWD)

| VWD Flow Cell Selection | | | | | | |
|----------------------------|--------------------|-----------------------|---------------------|----------------|------------|--|
| Typical Column Length (cm) | Typical Peak Width | Recommended Flow Cell | | | | |
| < = 5 | 0.025 | Micro flow cell | | | | High pressure flow cell for pressure above 100 bar |
| 10 | 0.05 | 0.05-0.2 mL/min | Semimicro flow cell | | | |
| 20 | 0.1 | | Standard flow cell | | | |
| > = 40 | 0.2 | | | | | |
| Typical flow rate | | 0.05-0.2 mL/min | 0.2-0.4 mL/min | 0.4-0.8 mL/min | 1-2 mL/min | 0.05-5 mL/min |
| Internal column diameter | | 1.0 mm | 2.1 mm | 3.0 mm | 4.6 mm | |

Flow Cells and Repair Kits for VWD

| Description | Use With | Specifications | Part No. | Repair Kit |
|--------------------------------------|--------------------|----------------------------|-------------|-------------|
| Standard flow cell, RFID | G1314D/E/F, G7114B | 10 mm, 14 μ L, 40 bar | G1314-60186 | G1314-65061 |
| Semimicro flow cell, RFID | G1314D/E/F, G7114B | 6 mm, 5 μ L, 40 bar | G1314-60183 | G1315-68713 |
| Micro flow cell, 3 mm, RFID | G1314D/E/F, G7114B | 2 μ L, 120 bar | G1314-60187 | G1315-68713 |
| Micro flow cell, 5 mm | G1314A/B/C | 1 μ L, 40 bar | G1314-60081 | G1314-65052 |
| High pressure flow cell, RFID | G1314D/E/F, G7114B | 10 mm, 14 μ L, 400 bar | G1314-60182 | G1314-65054 |
| | | | | G1315-68713 |
| Preperative flow cell, 0.06 mm, RFID | G7114B | 0.06 mm, 50 bar | G1314-60023 | |
| Preperative flow cell, 3 mm, RFID | G7114B | 3 mm, 50 bar | G1314-60024 | |
| Preperative flow cell, 0.3 mm, RFID | G7114B | 0.3 mm, 50 bar | G1314-60025 | |

Capillaries for VWD Flow Cells

| Flow Cell Description | Part No. | Inlet Capillary | Part No. | Outlet Capillary | Part No. |
|--------------------------------------|-----------------|--|-----------------|---|-----------------|
| Standard flow cell | G1314-60186 | Inlet capillary, 0.17 mm id, 600 mm long | 5062-8522 | Waste capillary, PEEK, 0.25 mm id | 5062-8535 |
| RFID | | | | Finger-tight PEEK fitting, 0.06 inch, 2/pk | 0100-1516 |
| Semimicro | G1314-60183 | Inlet capillary, 0.12 mm id, 400 mm long | 5021-1823 | Waste capillary, PEEK, 0.25 mm id | 5062-8535 |
| Flow cell, RFID | | | | Finger-tight PEEK fitting, 0.06 inch, 2/pk | 0100-1516 |
| Micro flow cell, 3 mm, RFID | G1314-60187 | Inlet capillary, 0.12 mm id, 310 mm long | G1314-87301 | Outlet capillary, 0.17 mm id, 120 mm long | G1314-87302 |
| Micro flow cell, 5 mm | G1314-60081 | Inlet capillary, 0.12 mm id, 400 mm long | 5021-1823 | Outlet capillary, 0.17 mm id, 120 mm long | G1314-87302 |
| High pressure flow cell, RFID | G1314-60182 | Inlet capillary, 0.17 mm id, 380 mm long | G1315-87311 | Outlet capillary, 0.17 mm id, 120 mm long | G1314-87302 |
| Preparative flow cell, 3 mm, RFID | G1314-60024 | Stainless steel capillary, 0.5 mm id, 0.9 mm od, 250 mm long | G1315-87305 | | |
| Preparative flow cell, 0.06 mm, RFID | G1314-60023 | Stainless steel capillary, 0.7 x 1000 mm | 5067-5748 | Outlet tubing, PTFE-ESD, 2 m length, 1.0 mm id, 1.6 mm od, with fittings (for 100 - 300 mL/min) | G1315-67304 |
| | | | | Outlet tubing, PTFE-ESD, 2 m length, 0.8 mm id, 1.6 mm od, with fittings (up to 100 mL/min) | G1315-67305 |
| Preparative flow cell, 0.3 mm, RFID | G1314-60025 | Tubing assembly, 6 mm id, 9 mm od | 5063-6527 | Outlet tubing, PTFE-ESD, 2 m length, 1.0 mm id, 1.6 mm od, with fittings (for 100 - 300 mL/min) | G1315-67304 |
| | | | | Outlet tubing, PTFE-ESD, 2 m length, 0.8 mm id, 1.6 mm od, with fittings (up to 100 mL/min) | G1315-67305 |

Special Accessory VWD

| Description | Specifications | Part No. |
|---------------------------------|---|-----------------|
| Back pressure regulator 100 psi | For preparative scale flow cells, keeps the system pressure at 100 psi, used for low flow rates to remove air bubbles from the flow cell (e.g. MeOH/H ₂ O gradients), including 50 cm PTFE tubing, 1.6 mm od, 0.8 mm id, plus fittings | 5042-6443 |

Diode Array Detector (DAD)/ Multiple Wavelength Detector (MWD)

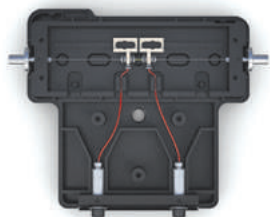
Cleaning or Replacing DAD/MWD Flow Cells

- A decrease in detector performance or unusual noise levels may mean you have dirty flow cell windows
- Clean and reassemble one side of the flow cell before beginning the other side to prevent mixing the front and rear gaskets, which have different hole diameters
- While cleaning or replacing flow cell windows, if the washers fall out of the window assembly, they must be inserted in the correct order with a PTFE ring to prevent any leaks from the flow cell window
- Clean the cell body with water or isopropanol
- After opening the cell you should always use a new gasket

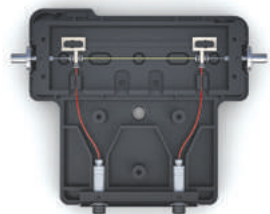


DAD/MWD Flow Cell Selection

| Typical Column Length (cm) | Typical Peak Width | Recommended Flow Cell | | | | |
|----------------------------|--------------------|-----------------------|----------------|----------------|------------|-------------------------|
| < = 5 | 0.025 | 80/500 nL flow cell | | | | |
| 10 | 0.05 | Semimicro flow cell | | | | High pressure flow cell |
| 20 | 0.1 | Standard flow cell | | | | |
| > = 40 | 0.2 | | | | | |
| Typical flow rate | | 0.05-0.2 mL/min | 0.2-0.4 mL/min | 0.4-0.8 mL/min | 1-2 mL/min | 0.05-5 mL/min |
| Internal column diameter | | 0.3-1 mm | 2.1 mm | 3.0 mm | 4.6 mm | |



InfinityLab Max-Light HDR flow cell, interior view, to show short 3.7 mm path length for high concentrations, G4212-60032



InfinityLab Max-Light cartridge cell, interior view, 60 mm path for high concentrations, G4212-60007

Flow Cells and Repair Kits for DAD/MWD

| Description | Specifications | Part No. | Repair Kit Part No. |
|--|--|-------------|---------------------|
| For use with G1315A/B, G1365A/B | | | |
| Standard flow cell | 10 mm, 13 μ L, 120 bar | G1315-60012 | |
| Semimicro flow cell | 6 mm, 5 μ L, 120 bar | G1315-60011 | |
| For use with G1315C/D, G1365C/D, G7115A, G7165A | | | |
| Standard flow cell, with RFID tag | 10 mm, 13 μ L, 120 bar | G1315-60022 | G1315-68712 |
| Semimicro flow cell, with RFID tag | 6 mm, 5 μ L, 120 bar | G1315-60025 | G1315-68713 |
| Micro flow cell, with RFID tag | 3 mm, 2 μ L, 120 bar | G1315-60024 | G1315-68713 |
| Micro high-pressure flow cell | 6 mm, 1.7 μ L, 400 bar | G1315-60015 | |
| Flow cell, 500 nL | 10 mm, 50 bar | G1315-68724 | |
| Flow cell, 80 nL | 6 mm, 50 bar | G1315-68716 | |
| Preparative flow cell | 3 mm, 120 bar, stainless steel | G1315-60016 | G1315-68712 |
| Preparative flow cell | 0.3 mm, 20 bar, quartz | G1315-60017 | |
| Preparative flow cell | 0.06 mm, 20 bar, quartz | G1315-60018 | |
| Bio-inert standard flow cell, with RFID tag | 10 mm, 13 μ L, 120 bar | G5615-60022 | |
| Flow cell SFC-LD | 3 mm, 2 μ L, 400 bar | G4301-60200 | |
| Flow cell for 1260 Infinity SFC | 10 mm, 13 μ L, 400 bar | G4301-60100 | |
| InfinityLab Max-Light cartridge cells for use with G4212A/B, G7117A/B | | | |
| Max-Light cartridge cell* | 10 mm, $\sigma_v = 1.0$ μ L, with RFID tags | G4212-60008 | |
| Max-Light cartridge cell* | 60 mm, $\sigma_v = 4$ μ L, with RFID tags | G4212-60007 | |
| Max-Light cartridge test cell* | Recommended instrument diagnostic tests | G4212-60011 | |
| Max-Light ultra low dispersion flow cell* | 10 mm, $\sigma_v = 0.6$ μ L, with RFID tags | G4212-60038 | |
| Max-Light High Dynamic Range (HDR) flow cell* | 3.7 mm, $\sigma_v = 0.8$ μ L, with RFID tags | G4212-60032 | |

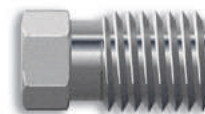
* Maximum Operating Pressure (MPO): 70 bar. The maximum pressure at which a system can operate continuously under normal conditions.
Maximum Incidental Pressure (MIP): 150 bar. The maximum pressure which the system can experience during a short time.

Capillaries for DAD/MWD Flow Cell

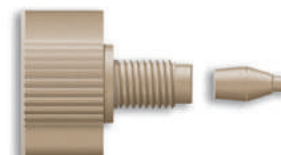
| Flow Cell Description | Part No. | Inlet Capillary | Part No. | Outlet Capillary | Part No. |
|------------------------------------|-------------|--|-------------|---|-------------|
| Standard flow cell, with RFID tag | G1315-60022 | Inlet capillary with heat exchanger, 0.17 mm id, 590 mm long | G1315-87321 | Outlet capillary, 0.17 mm id, 200 mm long | G1315-87302 |
| Standard flow cell | G1315-60012 | | | | |
| Semimicro flow cell, with RFID tag | G1315-60025 | DAD heat exchanger capillary, 0.17 mm id, 310 mm long | G1315-87319 | Outlet capillary, 0.12 mm id, 200 mm long | G1315-87306 |
| | | | | Outlet capillary, 0.17 mm id, 200 mm long | G1315-87302 |
| | | | | Outlet capillary, 0.12 mm id, 200 mm long | G1315-87306 |
| | | | | Outlet capillary, 0.17 mm id, 200 mm long | G1315-87302 |
| Semimicro flow cell | G1315-60011 | | | | |
| Micro flow cell, with RFID tag | G1315-60024 | DAD heat exchanger capillary, 0.12 mm id, 310 mm long | G1315-87339 | Outlet capillary, 0.12 mm id, 200 mm long | G1315-87306 |
| | | | | Outlet capillary, 0.17 mm id, 200 mm long | G1315-87302 |
| Micro high-pressure flow cell | G1315-60015 | Inlet capillary with heat exchanger, 0.12 mm id, 290 mm long | G1315-87325 | Outlet capillary, 0.12 mm id, 200 mm long | G1315-87306 |

80 nL and 500 nL Flow Cell Supplies

| Description | Unit | Part No. |
|--|-------|-----------|
| Fitting screw | 10/pk | 5063-6593 |
| Double winged nuts and 0.03 inch ferrules | 10/pk | 5065-4422 |
| Ferrule and stainless steel lock ring, lite touch, 0.03 inch | 10/pk | 5063-6592 |
| Union adjustment tool | 2/pk | 5022-2146 |
| ZDV universal union, stainless steel, no fittings | 1/pk | 5022-2184 |
| Open end wrench, 4 mm | | 8710-1534 |



Fitting, screw, 5063-6593



Double winged PEEK nut & ferrule (WPF), 5065-4422



ZDV universal union, 5022-2184



Wrench, open end, for use with PEEK-coated fused silica capillaries, 8710-1534

500 nL Flow Cell and Replacement Parts

| Description | Comments | Part No. |
|---|--|-------------|
| Flow cell, 500 nL | Contains quartz flow cell with 10 mm path length and 500 nL volume and connecting capillaries, max 50 bar pressure | G1315-68724 |
| Quartz cell body, 10 mm | | G1315-80001 |
| Cell seal assembly, 500 nL | | G1315-87101 |
| Capillary, fused silica/PEEK, 100 µm id, 30 cm long | Inlet | G1315-87333 |
| Capillary, fused silica/PEEK, 50 µm id, 40 cm long | Inlet | G1315-87323 |
| Capillary, fused silica/PEEK, 100 µm id, 12 cm long | Outlet | G1315-87338 |
| Capillary, fused silica/PEEK, 50 µm id, 12 cm long | Outlet | G1315-87328 |

80 nL Flow Cell and Replacement Parts

| Description | Comments | Part No. |
|---|--|-------------|
| Flow cell, 80 nL | Contains quartz flow cell with 6 mm path length and 80 nL volume and connecting capillaries, maximum 50 bar pressure | G1315-68716 |
| Quartz cell body, 80 nL, 6 mm path length | | G1315-80002 |
| Capillary, fused silica/PEEK, 50 µm id, 40 cm long | Inlet | G1315-87323 |
| Capillary, fused silica/PEEK, 50 µm id, 12 cm long | Outlet | G1315-87328 |
| Capillary, fused silica/PEEK, 25 µm id, 20 cm long | Inlet | G1315-87313 |
| Capillary, fused silica/PEEK, 25 µm id, 60 cm long | Outlet | G1315-87318 |
| 1/32 in ferrule and stainless steel lock ring, lite touch | | 5063-6592 |



Finger-tight PEEK fitting, 0.06 inch, 0100-1516

Preparative Flow Cells and Replacement Parts

| Description | Part No. |
|---|-------------|
| Preparative flow cell, 0.3 mm, 20 bar, quartz | G1315-60017 |
| Preparative flow cell, 0.06 mm, 20 bar, quartz | G1315-60018 |
| Tubing, PTFE, 0.8 mm id, 2 m | G1315-67301 |
| Tubing, PTFE, 0.5 mm id, 0.8 m | G1315-67302 |
| Cell housing | G1315-27705 |
| Finger-tight fitting, PEEK, 0.06 inch, 2/pk | 0100-1516 |
| Quartz body, 0.3 mm | G1315-80004 |
| Preparative flow cell, stainless steel, 3 mm, 120 bar | G1315-60016 |
| Connecting capillary, stainless steel, 0.5 mm, 250 mm | G1315-87305 |

Detector Maintenance Kits

Detector Maintenance Kits

| Description | Kit Contents | Part No. |
|--|--|-------------|
| Variable Wavelength Detector (VWD) | | |
| Standard "D" type flow cell kit For G1314A/B/C/D/E/F | Includes windows (2/pk), gaskets #1 (2/pk), gaskets #2 (2/pk) | G1314-65061 |
| Semimicro flow cell kit | Includes windows (2/pk), gaskets: standard #1 (2/pk), semimicro #1, semimicro #2 | G1314-65056 |
| Micro flow cell kit | Includes windows (2/pk), gaskets #1 (2/pk), gaskets #2 (2/pk) | G1314-65052 |
| Cell repair kit, semimicro cell For G1315A/B, G1365A/B, G1315C/D, G1365C/D | Includes window screw kit, 4 mm hexagonal wrench, seal kits | G1315-68713 |
| High-pressure flow cell kit | Includes windows (2/pk), Kapton gaskets (2/pk), and PEEK rings (2/pk) | G1314-65054 |
| Diode Array Detector (DAD)/Multiple Wavelegnth Detector (MWD) | | |
| Cell repair kit for standard cell For G1315A/B, G1365A/B, G1315C/D, G1365C/D | Includes window screw kit, 4 mm hexagonal wrench, seal kit | G1315-68712 |
| Cell repair kit, semimicro cell For G1315A/B, G1365A/B, G1315C/D, G1365C/D | Includes window screw kit, 4 mm hexagonal wrench, seal kits | G1315-68713 |

In a tight spot?

Try an InfinityLab Quick Turn fitting

For instrument connections that are too tight for Quick Connect fittings, you can rely on Agilent InfinityLab Quick Turn fittings. Like our Quick Connect fittings, they leverage a proprietary spring-loaded design for zero dead volume and a sure connection.

As easy as closing a lever: The proprietary Agilent design features a spring-loaded mechanism for zero dead volume and a sure, tight connection.

Turn to **Page 106**.





G4260B 1260 Series ELSD

Other Detectors

G4260B 1260 and G4261B 1290 Series Evaporative Light Scattering Detector Supplies

| Description | Part No. |
|---------------------------------|-------------|
| ELSD air adapter kit | PL0890-0640 |
| Solvent waste container, 500 mL | PL0890-0320 |
| Gas inlet frit, 10 µm | PL0890-0525 |

1200 Series Evaporative Light Scattering Detector

| Description | Kit Contents | Part No. |
|--|--------------------|-------------|
| Seal kit, for nebulization chamber | Includes seal kits | G4218-68010 |
| Analog cable | | PL0880-0310 |
| Gas inlet tube, 2 m | | PL0890-0305 |
| Rear exhaust hose, PVC 2 m | | PL0890-0310 |
| Solvent waste tube, 2 m | | PL0890-0315 |
| RS232 communication cable | | PL0890-0325 |
| Trigger cable, for dimension software | | PL0890-0345 |
| Remote start cable, for third party LCs only | | PL0890-0350 |

Refractive Index Detector (RID) Supplies (G1362A, G7162A/B)

| Description | Part No. |
|---|-------------|
| Tubing kit | G1362-68709 |
| Includes 300 mm recycle valve to recycle port, 200 mm recycle valve to waste port, 120 mm purge valve to recycle valve, 270 mm purge valve to sample cell, 170 mm purge valve to reference cell | |
| Interface tubing kit | G1362-68706 |
| Includes 1/8 inch ferrule, 1/3 inch nut, PTFE tubing | |
| Interface capillary, 400 mm, 0.17 mm id | G1362-87300 |
| Restriction capillary, 0.17 mm id | G1362-87301 |

Fluorescence Detector (FLD) Supplies (for G1321A/B, G7121A)

| Description | Part No. |
|---|-------------|
| Detector lamp | 2140-0600 |
| Flow cell, 8 μ L, 20 bar | G1321-60005 |
| Flow cell, 4 μ L, 20 bar | G1321-60015 |
| Cuvette kit, 8 μ L, 20 bar | G1321-60007 |
| Includes tubing, stainless steel fitting, front and back ferrule, PEEK fitting, syringe needle and syringe | |
| Corrugated tubing, polypropylene, 6.5 mm id, 5 m | 5062-2463 |
| Tubing, PTFE, FEP, 0.7 mm id, 5 m | 5062-2462 |
| Finger-tight fitting, PEEK, 0.06 inch, 2/pk | 0100-1516 |
| Column connecting capillary with fittings, 380 x 0.17 mm | G1315-87311 |
| Front ferrule, stainless steel, 1.6 mm, 10/pk | 5180-4108 |
| Back ferrule, stainless steel, 0.06 inch, 10/pk | 5180-4114 |
| Swagelok, 1.6 mm, screw | 5061-3303 |
| Fluorescence detector calibration sample, 1 g glycogen | 5063-6597 |
| Open end wrench, 0.25 and 0.31 inch | 8710-0510 |
| Glass syringe | 9301-1446 |
| Syringe needle | 9301-0407 |
| Disposable syringe, 20 mL, 100/pk | 5190-5103 |
| Disposable syringes, 20 mL, polypropylene, 10/pk | 5067-6624 |
| FLD wavelength calibration kit | G7121-68001 |
| Includes calibration sample (1 g), premium syringe filters (100/pk), glass syringe with needle, finger-tight fitting PEEK, technical note | |



Flow cell for G1321A fluorescence detector,
G1321-60005



Stainless steel front ferrules, 5180-4108



Back ferrules 1/16 in, 5180-4114

TIPS & TOOLS

For an introduction to GPC/SEC, see primer 5990-6969EN at www.agilent.com/chem/library, or visit www.agilent.com/chem/gpcsec





BIO-INERT SUPPLIES

Robust and true bio-inertness, for your bio-applications

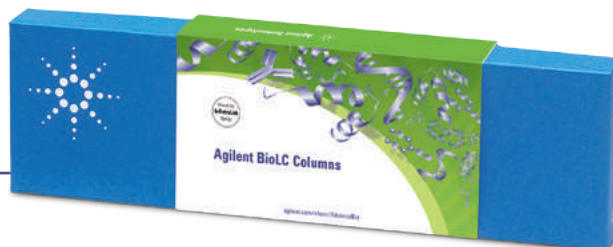
The Agilent 1260 Infinity II Bio-inert LC and Agilent bio-inert supplies provide dedicated InfinityLab solutions for your biomolecule analysis. Stainless-steel clad PEEK capillaries are the arteries and veins of the Bio-inert LC. The PEEK enables a metal free sample flowpath and the stainless steel mantling enables use of pressures of up to 600 bar. This metal-free sample flowpath ensures the integrity of your biomolecules, minimizing unwanted surface interactions. Together with the AdvanceBio column portfolio, or BioLC columns for SEC, IEX, reverse phase, and peptide mapping Agilent provides a complete solution for your bio-applications.

1260 Infinity & Infinity II Bio-inert Quaternary Pump Parts (G5611A/G5654A)

| Description | Part No. |
|--|-------------|
| Bio-inert purge valve | G5611-60062 |
| Bio-inert active inlet valve | G5611-60025 |
| Bio-inert cartridge, for active inlet valve, 600 bar | G5611-60020 |
| Bio-inert outlet valve | G5611-60067 |
| Sapphire piston for 1220/1260/1290 Infinity II | 5067-4695 |
| Bio-inert piston seal | G5611-21503 |
| Bio-inert wash seal | 0905-1731 |
| Bio-inert seal keeper | G5611-26210 |
| Bio-inert support ring | G5611-63010 |

TIPS & TOOLS

For information on the Agilent's broad portfolio of complementary BioLC columns, turn to **Pages 132–133**, or visit www.agilent.com/advancebio



1260 Infinity LC Bio-inert High Performance Autosampler Parts (G5667A)

| Description | Part No. |
|---|-------------|
| Bio-inert 2 position/6 port injection valve | 5067-4131 |
| Rotor seal, 3 grooves, maximum 600 bar | 0101-1416 |
| Bio-inert stator | 5068-0060 |
| Stator face, ceramic | 0100-1851 |
| Bio-inert needle assembly | G5667-87200 |
| Tool for needle adjustment | G5667-40500 |
| Seat, PEEK/stainless steel, 0.17 x 105 mm, RLO/RLO, bio-inert | G5667-81008 |
| Sapphire piston, slim base | 5067-4695 |
| Bio-inert piston seal | G5611-21503 |
| Loop, PEEK/stainless steel, 100 µL, RLO/RLO, bio-inert | G5667-81006 |
| Loop flex assembly, 40 µL | G4226-60415 |
| Vial plate, for 40 x 2 mL vials, 1/pk | 5023-2471 |
| Vial plate, for 54 x 2 mL vials, 6/pk | G2255-68700 |



Stator face, ceramic, 0100-1851

1260 Infinity II LC Bio-inert Multisampler Parts (G5668A)

| Description | Part No. |
|--|-------------|
| Needle, for bio-inert multisampler | G5668-87200 |
| Seat, for bio-inert multisampler, 0.17 mm id | G5668-87017 |
| Rotor seal, 2 groove, elongated groove | 5068-0209 |
| Stator face, ceramic | 0100-1851 |
| Sample loop, 100 µL, bio-inert | G5668-60500 |
| Additional standard drawer kit, double height (2H), 1/pk | G7167-60020 |
| Additional drawer kit, single-height (1H), 2/pk | G7167-60021 |
| Additional drawer kit, triple-height (3H), 2/pk | G7167-60022 |
| Vial plate, for 54 x 2 mL vials, 6/pk | G2255-68700 |
| Vial plate, for 40 x 2 mL vials, 1/pk | 5023-2471 |
| Multidraw kit, 400 bar, bio-inert | G5667-68711 |
| Preventive maintenance kit, for bio-inert multisampler | G5668-68730 |
| Includes needle, seat, rotor seal | |



Rotor seal, 2 position/6 port, 600 bar for G1316B,
0101-1409

1260 Infinity & 1260 Infinity II Bio-inert Valve Parts

| Description | Part No. | Rotor Seal (PEEK) | Stator Head | Stator face |
|---|-----------|-------------------|-------------|-------------|
| 2 position/6 port valve head, 600 bar, bio-inert | 5067-4148 | 0101-1409 | 5068-0060 | 0100-1851 |
| 2 position/10 port valve head, 600 bar, bio-inert | 5067-4132 | 5068-0041 | 5068-0040 | 5068-0095 |
| 4-Column selector valve head, 600 bar, bio-inert | 5067-4134 | 5068-0045 | 5068-0044 | 5068-0093 |
| 12 position/13 port solvent selector valve head, 200 bar, bio-inert | 5067-4159 | 0101-1288 | 5068-0097 | 0101-1288 |

Bearing ring for all valves: p/n 1535-4045

1260 Infinity & 1260 Infinity II Bio-inert Detector Parts

| Description | Used In | Part No. |
|---|------------------------------------|-------------|
| Bio-inert standard flow cell, with RFID tag | G1315C/D, G1365C/D, G7117A, G7165A | G5615-60022 |
| Bio-inert FLD flow cell | G1321B/C | G5615-60005 |

1260 Infinity LC Bio-inert Fraction Collector Parts (G5664A)

| Description | Part No. |
|---|-------------|
| Fraction collector kit, includes: | G5664-68712 |
| • Bio-inert PEEK tubing, valve to needle (G5664-86703) | |
| • Bio-inert PEEK tubing, valve to detector (G5664-86706) | |
| • Finger-tight fitting, PEEK, 0.06 inch, 2/pk (0100-1516) | |
| • Technical note | |
| Test tubes, 12 x 100 mm, 8 mL, 250/pk | 5022-6531 |
| Test tubes, 16 x 100 mm, 13 mL, 250/pk | 5022-6532 |
| Test tubes, 25 x 100 mm, 35 mL, 100/pk | 5042-6459 |
| Test tubes, 30 x 100 mm, 58 mL, 100/pk | 5042-6458 |

1260 Infinity LC Bio-inert General Supplies

| Description | Used In | Part No. |
|---|-------------------------------------|-------------|
| Bio-inert low dispersion heat exchanger | G1316C | G5616-81000 |
| InfinityLab bio-inert Quick-Connect heat exchanger, 0.17 mm id, includes Quick Connect fitting and UHP-FF fitting* | G7116A/B | G7116-60009 |
| Bio-inert Quick-Connect heat exchanger, without fittings | G7116A/B | G7116-60041 |
| Fraction collector kit, includes: | G5664A Bio-inert fraction collector | G5664-68712 |
| <ul style="list-style-type: none"> • Bio-inert PEEK tubing, valve to needle (G5664-86703) • Bio-inert PEEK tubing, valve to detector (G5664-86706) • Finger-tight fitting, PEEK, 0.06 inch, 2/pk (0100-1516) • Technical note | | |
| Bio-inert union, stainless steel with PEEK insert, 600 bar | Bio-applications | 5067-4741 |
| Tubing, PEEK, 1.6 mm od, 0.18 mm id, 1.5 m | Bio-applications | 0890-1763 |

*additional bio-inert union (p/n 5067-4741) required if not connected to column selection valve



InfinityLab bio-inert Quick-Connect heat exchanger, with fittings, G7116-60009



Bio-inert union, 5067-4741

TIPS & TOOLS

For our range of bio-inert capillaries, turn to **Page 110-111**.

To learn more about our comprehensive LC portfolio, go to www.agilent.com/chem/lc



PURIFICATION SUPPLIES

Purely better solutions for compound purification

Agilent offers the most comprehensive portfolio of flexible and reliable solutions for sample purification by LC. With analytical, semipreparative, preparative, and pilot-scale instrumentation, columns, and supplies Agilent has a solution that meets your purification needs and your budget.

Agilent 1290 Infinity II Open-Bed Fraction Collector:

Set new benchmarks in your LC purification workflows, while occupying a minimum of bench space. This new Agilent module facilitates automated, high-capacity fraction collection with lowest delay volumes to minimize peak dispersion and carryover. Variable bed configuration for collection of individual fractions or large volumes, as well as capability to cluster up to four fraction collectors.



Agilent 1260 Infinity automated LC/MS purification system:

A truly automated LC/MS system providing pure fractions without method development or scale-up work - meeting the demands for secure compound confirmation and high throughput.

Agilent 1260 Infinity automated LC/UV purification system:

A truly automated LC/UV system providing pure fractions without method development or scale-up work - comfortably with minimum investment and training.

Agilent 1260 Infinity analytical scale purification system:

An indispensable tool in your purification workflow - on one system with one software you can perform both analytical UHPLC and preparative LC/MS.

Agilent 1260 Infinity preparative scale purification system:

Offers ultimate flexibility - use it as a workhorse for automated, high-throughput applications, or as a method scale-up solution for optimizing resolution and recovery.

General Supplies

| Description | Comments | Part No. |
|--|---|-------------|
| Bottle head assembly for preparative system | Includes bottle head, tubing (PTFE, 4.7 mm od), solvent inlet filter (glass, 40 µm) and frit adapters | G1361-60022 |
| Frit adapter, PTFE, for 4.7 mm od tubing | | G1361-23205 |
| Glass filter, solvent inlet, 40 µm pore size | | 3150-0944 |
| Solvent bottle, clear, 2 L, 2 inlets | GL45 thread | 5065-4421 |
| Solvent bottle, amber, 2 L | GL45 thread | 9301-6341 |
| Solvent bottle, clear, 2 L | GL45 thread | 9301-6342 |



Solvent bottle, clear, 2 L, 2 inlets, 5065-4421

Supplies for Preparative Pump (G1361A)

| Description | Comments | Part No. |
|--|---|-------------|
| Filter assembly, stainless steel, with PEEK ring, 2 µm pore size | | 5022-2192 |
| Valve assemblies (inlet/outlet), for preparative pumps | Valve cartridge, single seat, short | G1361-60012 |
| Valve assembly double seat | Requires valve adapter, long, out (G1361-25202) and valve adapter, long, in (G1361-25203) | G1361-60052 |
| Sapphire piston (preparative) | | G1361-22402 |
| Piston seal | | 5022-2188 |
| O-ring, Viton, 30 mm | | 0905-1516 |



Valve cartridge, single seat, short, G1361-60012



Loop capillary, stainless steel, 100 μ L, 01078-87302



Twin needle seat assembly, for G2258A,
G2258-87102

Supplies for Preparative Autosampler (G2260A)

| Description | Part No. |
|--|-------------|
| Needle assembly | G2260-87201 |
| Needle seat | G2260-87101 |
| Multi draw loop, 5 mL | G2260-68711 |
| Plunger assembly, 900 μ L | 5062-8587 |
| Loop capillary, stainless steel, 100 μ L | 01078-87302 |
| Metering seal, 900 μ L | 0905-1294 |
| Loop extension capillary, stainless steel, 900 μ L | G1313-87303 |
| Union, high-flow, stainless steel, no fitting | 5022-2133 |
| Rotor seal, PEEK, and stator face, PEEK, kit | 0101-1268 |
| Isolation seal | 0100-1852 |

Supplies for Dual Loop Autosampler (G2258A)

| Description | Part No. |
|--|-------------|
| Needle kit | G2258-68710 |
| Twin needle seat assembly, for G2258A | G2258-87102 |
| Buffer loop tubing assembly, PTFE | G2258-87300 |
| Buffer loop extension assembly | G2258-60002 |
| Rotor seal, vespel, 5-groove, 0.65 inch od | 0100-2415 |
| Piston seal | 0905-1599 |
| Piston for G2258A Dual Loop ALS, 5 mL | G2258-60003 |
| Capillary loop, 2 μ L, stainless steel | 5068-0031 |
| Capillary loop, 5 μ L, stainless steel | 5068-0032 |
| Capillary loop, 10 μ L, stainless steel | 5068-0051 |
| Capillary loop, 20 μ L, stainless steel | 5068-0033 |
| Capillary loop, 50 μ L, stainless steel | 5068-0034 |
| Capillary loop, 100 μ L, stainless steel | 5068-0035 |

Test Tubes

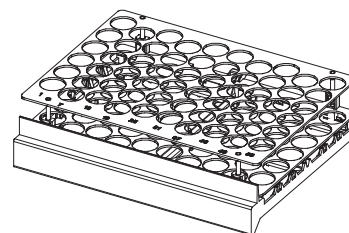
| Tube Dimensions (id x height) | Unit | Volume | Use with | Part No. |
|--|-------------|---------------|-----------------|-----------------|
| 12 x 100 mm | 250/pk | 8 mL | G1364B, G7159B | 5022-6531 |
| 12 x 150 mm | 250/pk | 11 mL | G7159B | 5190-9093 |
| 16 x 100 mm | 250/pk | 13 mL | G1364B, G7159B | 5022-6532 |
| 16 x 150 mm | 250/pk | 21 mL | G7159B | 5190-9092 |
| 25 x 100 mm | 100/pk | 35 mL | G1364B, G7159B | 5042-6459 |
| 25 x 150 mm | 100/pk | 55 mL | G7159B | 5190-9091 |
| 30 x 100 mm | 100/pk | 58 mL | G1364B, G7159B | 5042-6458 |
| 30 x 150 mm | 100/pk | 78 mL | G7159B | 5190-9090 |

Trays for Fraction Collectors (G1364B/C)

| Hole Diameter (mm) | No. of Tubes | Part No. |
|---------------------------|---------------------|-----------------|
| 30 | 40 | G1364-84523 |
| 25 | 60 | G1364-84524 |
| 16 | 126 | G1364-84525 |
| 12 | 215 | G1364-84516 |

Funnel Tray for Fraction Collectors (G1364B/C)

| Description | Part No. |
|---|-----------------|
| 40 funnel tray for G1364C fraction collector | G1364-84532 |
| Tray for 2 well plates, with 10 funnels, cooled | G1364-84522 |
| Funnel seals for G1364-84502 tray, 10/pk | G1364-68730 |
| Tubing for funnels of G1364-84502, 10/pk | G1364-86707 |



Tray holding 60 tubes, 25 x 100 mm, 35 mL

1290 Infinity II LC OpenBed Fraction Collector Supplies (G7159B)

| Description | Part No. |
|---|-------------|
| 1290 Infinity II HiP PrepFC tubing kit, 50 mL | G9321-60952 |
| 1290 Infinity II HiP PrepFC tubing kit, 200 mL | G9321-60951 |
| Fitting, 1/4-28, for ESD-PEEK tubing, 2.5 mm od | 5023-2871 |
| Fitting, 1/4-28, for ESD-PEEK tubing, 2.0 mm od | 5023-2872 |
| Fitting, 1/4-28, for ESD-PEEK tubing, 1.6 mm od | 5023-2874 |
| Delay calibrant | G9321-60592 |
| Fraction collection remote Y-cabel (3000 mm) | 5188-8057 |



Tube container, 36 tubes, G9321-60055

Tube Containers and Drawer (G7159B)

| Description | Part No. |
|--|-------------|
| Drawer, for G7159B, ambient temperature | G9321-60085 |
| Tube container, 30 x 150 mm, 10 tubes, ambient | G9321-60015 |
| Tube container, 30 x 100 mm, 10 tubes, ambient | G9321-60058 |
| Tube container, 25 x 150 mm, 18 tubes, ambient | G9321-60025 |
| Tube container, 25 x 100 mm, 18 tubes, ambient | G9321-60035 |
| Tube container, 16 x 150 mm, 36 tubes, ambient | G9321-60129 |
| Tube container, 16 x 100 mm, 36 tubes, ambient | G9321-60055 |
| Tube container, 12 x 150 mm, 72 tubes, ambient | G9321-60131 |
| Tube container, 12 x 100 mm, 72 tubes, ambient | G9321-60045 |



1260 Infinity II Preparative Valve-Based Fraction Collector, G7166A

1260 Infinity II Preparative Valve-Based Fraction Collector Supplies (G7166A)

| Description | Part No. |
|--|------------|
| Tubing, PTFE, ESD-striped, 1.6 mm id x 2.5 mm od, 6 m length | 5023-2882 |
| Tubing, PTFE, ESD-striped, 1.2 mm id, 2.0 mm od, 2 m length | 5023-2878 |
| Fitting, 1/4-28, for ESD-PEEK tubing, 2.0 mm od | 5023-2872 |
| Fitting 1/4-28, for 2.5 mm id ESD-PEEK, 6/pk | 5023-2883 |
| Tubing, polyurethane ether based, 4 mm id, 6 mm od | 3710043100 |
| Elbow, 6 mm, push fit, male 1/8 BSP | 1610140200 |

GENERAL SUPPLIES

Your Agilent LC system arrives with a full complement of tools needed to perform general maintenance and operation procedures. Should you need additional or replacement tools, Agilent offers a selection of high-precision, high-quality, stainless steel tools, to avoid any deformation of the screws or nuts.

LC Tools

| Description | Part No. |
|---|-------------|
| LC tool kit | G7120-68708 |
| 1290 Infinity and Infinity II pump service kit | 5067-4699 |
| 1290 Infinity pump and Infinity II service kit, for Long Life and Easy Maintenance pump heads | 5067-6652 |
| Compact tool kit | G4296-68715 |
| Torque wrench, 1 to 25 Nm | 5067-5688 |
| Bit kit, for torque wrench | 5023-0282 |
| Open end wrench, 14 mm, for active inlet and purge valves | 8710-1924 |
| Hex driver, SW-4 slitted | 5023-2504 |
| Hex driver, SW-5 slitted | 5023-2503 |
| Hex driver, SW-6.35 slitted | 5023-2502 |
| LC tools, hex key kit | 5023-2524 |
| Includes long hex keys (1.5 / 2 / 2.5 / 3 / 4 / 5 mm) and universal handle grip | |
| Restriction capillary, 0.12 mm id, 2 m length | 5022-2159 |
| Multifunction tool | 8710-2474 |
| Insert tool (pump seals) | 01018-23702 |
| Blank nut, stainless steel | 5067-6127 |
| Blank nut, long, 10-32, PEEK with stainless steel core, finger-tight, for system diagnostic tests | 5043-0277 |
| Blank nut, stainless steel, for M4 fittings ports | 5067-6141 |
| Plastic tubing cutter | 8710-1930 |
| Blades, for plastic cutter, 5/pk | 8710-1931 |
| Mounting tool, for fitting SW5 and 0.25 inch screws, maximum torque 0.8 Nm | 5043-0915 |
| Disposable syringes, polypropylene, 20 mL, 10/pk | 5067-6624 |
| Luer-Lok needle assembly, PEEK | 5190-0924 |
| Syringe adapter, to connect to 1/4-28 thread fittings | 9301-1337 |



Compact tool kit, G4296-68715



Blank nut, long, 10-32, PEEK with stainless steel core, 5043-0277



Plastic tubing cutter, 8710-1930



Bio-inert mounting tool, 5043-0915



Blank nut M4, stainless steel, 5067-6141



InfinityLab Flex Bench Family

The demand for flexibility in today's lab is high. As LC/MS is being used more often, heavy stationary LC instruments can hinder productivity.

The innovative InfinityLab Flex Bench system, engineered by Agilent, provides an easily adjustable and maneuverable way for you to configure your instrument to suit your needs, anywhere in the lab.

Keep more of what you need close at hand

The adjustable, sturdy steel bench protects your sensitive LC system from accidental damage, while giving you fast, safe access to instrument components, solvent bottles, pumps, columns, and accessories. The Flex Bench allows you to:

- Modify the height of your LC instrument, for easy access to solvent bottles and increased instrument optimization, so that you can readily move modules to minimize dead volume for
- Fast LC. Safely configure your instrument to suit the way you work.
- Move instruments where you need them, when you need them.
- Whether you want to work next to your MS or move analysts to new projects the InfinityLab Flex Bench system lets you optimize your space while taking the hassle out of instrument relocation.

Get more flexibility in how you set up your LC system

The InfinityLab Benchtop system is engineered to provide an adjustable and safe way to optimize space, and configure the LC system to suit needs for higher productivity.

InfinityLab Flex Bench System

| Description | Comments | Part No. |
|--|--|------------|
| Flex Bench | 79 cm width, 79 cm depth, 165 cm height, 150 kg maximum load, comes with shelf assemblies (x 4) and waste bin | 5043-1252 |
| Flex Bench, with power strip | | 5043-1759 |
| Benchtop | Includes accessory shelf assemblies (x 3) | 5043-1711 |
| Benchtop, with power strip | | 5043-1740 |
| Accessories | | |
| Shelf assembly | 50 kg maximum load | 5043-1287 |
| Shelf assembly, special | 50 kg maximum load Allows for the additional attachment of three external valve drives to the lower side of the shelf | 5043-1245 |
| Accessory shelf assembly | 50 kg maximum load Required for mounting tray (p/n 5043-1725) and drawer (p/n 5043-1735) | 5043-1750 |
| Tray | | 5043-1725* |
| Drawer | | 5043-1735* |
| Monitor holder | | 5043-1745* |
| Waste bin | | 5043-1278 |
| Power cord | | 8121-2258 |
| Replacement hardware kit, for Flex Bench | Includes screws, nuts, bolts, tools, and two replacement casters (one type each) | 5043-1289 |

*Available end of 2017



Benchtop, 5043-1711

TIPS & TOOLS

For more information on the InfinityLab Flex Bench System, enter 5991-5163EN at www.agilent.com/search



RRLC inline filter, 5067-1551



Low dispersion inline filter, 01090-68702



Semiprep filter, 5064-8273



High pressure semiprep filter, 5022-2165

HPLC Inline Filters

Column inlet frit contamination can increase column backpressure and reduce efficiency. Microbore column blockages are a particular problem, due to the small diameter of the inlet frit. To prevent blockages, always use the appropriate filters in your LC system. Agilent offers two types of high pressure inline filter kits for use with any HPLC system.

HPLC Inline Filters

| Description | Frit Porosity (µm) | Frit Inlet id (mm) | Comments | Part No. | Replacement Frits |
|--|--|--------------------|---------------|-------------|--|
| Low dispersion inline filter, includes two frits, 2.1 mm, 2 µm pore size filter holder with inserts, 60 x 0.12 mm connecting capillary | 0.2 | 4.6 | max 600 bar | 5067-1553 | 5067-1562, 10/pk |
| RRLC inline filter, 2.1 mm, 0.2 µm pore size filter, connecting capillary, max 600 bar | 0.2 | 2.1 | max 600 bar | 5067-1551 | 5067-1555, 6/pk |
| Low dispersion inline filter, includes two frits, 2.1 mm, 2 µm pore size filter holder with inserts, 60 x 0.12 mm connecting capillary | 2 0.5 | 2.1 | < 1 mL/min | 01090-68702 | 280959-904, 10/pk 280959-907, 10/pk |
| Universal inline filter, includes two frits, 4.8 mm, 2 µm pore size filter holder with inserts, 130 x 0.25 mm connecting capillary | 2 | 4.8 | 1-5 mL/min | 01090-68703 | 01090-27609, 2/pk |
| Semiprep filter | 0.5 | 12.7 | 1-5 mL/min | 5064-8273 | 5022-2185 |
| High pressure semiprep filter | 10 | 19 | 5-10 mL/min | 5022-2165 | 5022-2166, 10/pk |
| Prep filter | 10 | | 10-100 mL/min | 5065-4500 | |
| Inline filter for G1311A | Recommended when high salt concentrations are used | | | G1311-60006 | |
| 1290 Infinity II inline filter | 0.3 | 2.0 | 1300 bar | 5067-6189 | 5023-0271, 5/pk |

Solvent Filters/Degassers

An added benefit of filtering solvents is that degassing occurs at the same time. This is particularly beneficial if you do not have an on-line degasser in your system. The benefits of solvent filtration:

- Degasses eluents as particulates are removed
- Prevents the formation of spurious peaks within the detector due to solvent outgassing at the low-pressure end of the chromatograph
- Increases solvent inlet lifetime
- Eliminates pump downtime caused by air locks and particulates in check valves
- Decreases piston wear, while increasing column life

Solvent Filters/Degassers

| Description | Part No. |
|--|-----------|
| HPLC solvent filter/degasser assembly | 3150-0577 |
| Replacement Parts for 3150-0577 | |
| Glass funnel, 250 mL | 5188-2743 |
| Sieve, PTFE coated | 5188-2744 |
| Seal, PTFE | 5188-2745 |
| Funnel base, glass | 5188-2746 |
| Filter Membranes | |
| Regenerated cellulose filter membranes, diameter 47 mm, pore size 0.45 μ m, 100/pk | 3150-0576 |
| Nylon filter membranes, diameter 47 mm, pore size 0.45 μ m, 100/pk | 9301-0895 |
| PTFE filter membranes, diameter 47 mm, pore size 0.45 μ m, 10/pk | 3150-0509 |



Glass solvent filter degasser, 3150-0577



Caffeine OQ/PV sample for dissolution test,
5042-6476

LC Standards

LC Standards

| Description | Part No. |
|---|-------------|
| Caffeine standards kit for LC OQ/PV Includes one 10 mL ampoule: 125.0 g/mL; four 5 mL ampoules: 5.0, 25.0, 250.0, and 500.0 g/mL caffeine in water | 8500-6762 |
| Caffeine standards kit for capillary OQ/PV Includes 5 ampoules, 5 mL: 2.0, 4.0, 20.0, 100.0, 200.0 g/mL caffeine in water | 5065-4420 |
| Caffeine OQ/PV sample for dissolution test, 150 mg/L caffeine in water, 500 mL | 5042-6476 |
| Caffeine standard, 250 g/mL | G4218-85000 |
| Enterprise Edition caffeine standard kit | 5190-0488 |
| Fluorescence detector calibration sample, 1 g glycogen | 5063-6597 |
| RI detector OQ/PV test sample Includes 5 ampoules, 5 mL: 5, 10, 15, 25, and 50 mg/mL glycerin in water | 5064-8220 |
| Isocratic and gradient standards Contains 0.15 % diethylphthalate, 0.01 % biphenyl, and 0.03 % terphenyl in MeOH (w/w). Gradient standard includes 0.32 % dioctyl phthalate as well. Two 0.5 mL ampoules of each. | 01080-68702 |
| Isocratic standard, 0.5 mL ampoule | 01080-68704 |
| Check out sample, phenone, 1 mL ampoule | 5188-6529 |
| Chip cube high mass reference (HP-1221), 0.5 mL | G1982-85001 |
| Chip cube high mass solvent (FC-70), 25 mL Fluorinert | G1982-85002 |
| Chip cube low mass reference sample, 1 g methyl stearate | G1982-85003 |
| ESI+APCI LC demo sample Contains 5 x 1 mL ampoules with 33 ng/L crystal violet, 77 ng/L carbazole, 300 ng/L 9-phenanthrol, 1 ng/L 1-hexanesulfonic acid sodium salt in water/methanol 60:40 | G1978-85000 |
| ES-TOF biopolymer reference standard kit Contains 7 x 2 mL ampoules with 5 mM purine, 1 M ammonium formate, 0.5 mM HP-0285, 0.1 mM HP-0321, 0.2 mM HP-1221, 0.2 mM HP-1821, 0.5 mM HP-2421 | G1969-85003 |
| HSA peptide standard mix kit 2 vials with 6 lyophilized peptides | G2455-85001 |

TIPS & TOOLS

Agilent has made vial, cap, and septum selection easy with its new Interactive Vial Selection Tool, available online in both desktop and mobile versions. The tool identifies the right vial and closures for your particular application, and provides the rationale for the choices offered.

Visit www.agilent.com/chem/SelectVials



LC CAPILLARIES

Your LC systems components are only as reliable as the connections between them

Think of your LC system as a chain from analyte to pump to column to detector to waste. Every link must operate at maximum efficiency, or the whole chain risks failure - compromising your results.

Agilent LC capillaries: Your link to analytical success

At Agilent, we invest heavily in the quality of our capillary connections. All are engineered and manufactured to the same quality standards as our columns and instruments, so you can protect the integrity of your results at every step of your LC flow path.

Using our flexible stainless steel and polymer capillaries and fittings can provide:

- Tight, leak-free connections
- Zero dead volume connections
- An inert surface (when using polymer or PEEK/stainless steel bio-inert capillaries)
- High flexibility without sacrificing durability
- Easy cutting to the exact length you need (PEEK tubing)
- Predefined lengths for specific flow path locations (capillaries)

In addition, all Agilent capillaries are precision cut with square ends, are burr-free, have no inner-diameter distortion, and come in a variety of materials to suit your needs.



Agilent's unique laser welding process ensures that the capillary ends are absolutely flat, eliminating any chance of capillary-induced dead volume.

TIPS & TOOLS

Easily find the right capillaries for your instrument with the Capillaries Selection Tool—go to www.agilent.com/chem/selectcapillaries

Capillary description keys

The tables below will be your guide to identifying the proper specifications for your capillary. On all capillaries, dimensions are noted in id (mm), length (mm), and where applicable, volume (μL). When you receive your capillary, these abbreviations are printed on the packaging.

Using the guide: This fitting is coded as SPF, for Swagelok, PEEK, Finger-tight.

| Type | |
|----------------|--------------------------|
| Key | Description |
| Capillary | Connection capillaries |
| Loop | Loop capillaries |
| Seat | Autosampler needle seats |
| Tube | Tubing |
| Heat exchanger | Heat exchanger |

| Material | |
|----------|-------------------------------|
| Key | Description |
| SST | Stainless steel |
| Ti | Titanium |
| PK | PEEK |
| FS/PK | PEEK-coated fused silica* |
| PK/SST | Stainless steel-coated PEEK** |
| PTFE | PTFE |
| FS | Fused silica |

*Fused silica in contact with solvent

**PEEK in contact with solvent

| Fitting Left/Fitting Right | |
|----------------------------|----------------------------|
| Key | Description |
| W | Swagelok + 0.8 mm port id |
| S | Swagelok + 1.6 mm port id |
| M | Metric M4 + 0.8 mm port id |
| E | Metric M3 + 1.6 mm port id |
| U | Female Swagelok union |
| L | Long |
| X | Extra long |
| H | Long head |
| G | Small head SW 4 mm |
| N | Small head SW 5 mm |
| F | Finger-tight |
| V | 1200 bar |
| B | Bio |
| P | PEEK |

The **type** gives some indication on the primary function, like a loop or a connection capillary.











The **material** indicates which raw material is used.

The **fitting** left/right indicate which fitting is used on both ends of the capillary.

At-a-glance color-coding keys

The color of your capillary will help you quickly identify the capillary id - see the chart to the right for reference.

Tip: As you move to smaller-volume, high efficiency columns, you'll want to use narrow id tubing, as opposed to the wider id tubing used for conventional HPLC instruments.

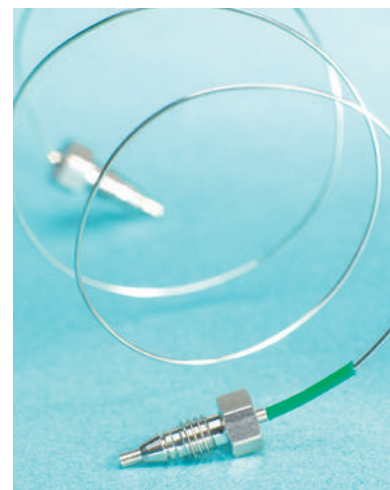
| Color-coding key for Agilent capillary tubing | | |
|---|---|------------|
| Internal diameter in mm | Color code | |
| 0.015 |  | Orange |
| 0.025 |  | Yellow |
| 0.05 |  | Beige |
| 0.075 |  | Black |
| 0.1 |  | Purple |
| 0.12 |  | Red |
| 0.17 |  | Green |
| 0.20/0.25 |  | Blue |
| 0.3 |  | Grey |
| 0.50 |  | Bone White |

Agilent capillary supplies are made from a variety of top-quality materials to suit your labs every need

Stainless steel (SST):

good resistance to pitting corrosion

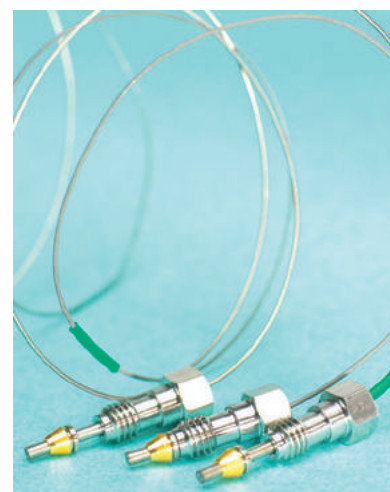
Stainless steel is ideal for most standard applications - except where bio-inertness is required, in which case we recommend PEEK-lined or bio-inert titanium capillaries. Agilent's 0.6 mm od flexible grade 316L stainless steel capillaries (chrome/nickel/molybdenum bearing grade) are also much easier to handle than conventional, rigid 1.6 mm od capillaries.



Titanium (Ti):

high inertness for biological applications

Analyzing metal-sensitive proteins and biotherapeutics presents challenging solvent conditions for LC instruments. In addition, biomolecules tend to bind nonspecifically to surfaces. For these reasons, bio-inert titanium is the best choice for these applications. Titanium is biocompatible, making bio-inert Titan capillaries perfect for applications where bio-inertness is paramount.

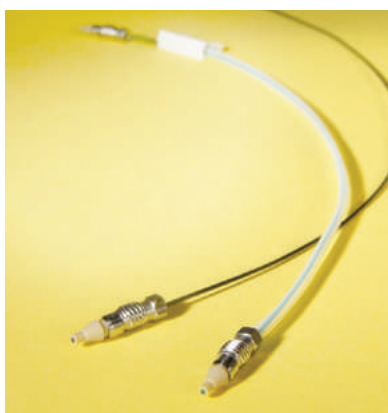




Stainless Steel-coated PEEK (PK/SST): high-pressure bio-inertness and robustness

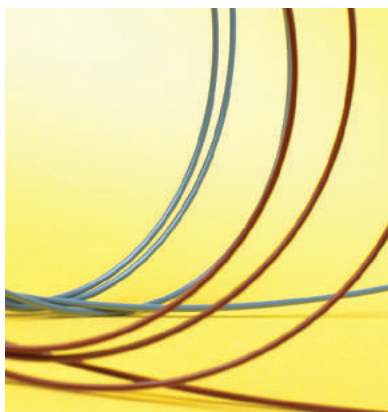
In biochromatography, capillaries and connectors should be inert to ensure the lowest interaction with protein samples. They must also be highly robust to withstand harsh cleaning procedures.

Unfortunately, metal-free PEEK capillaries can only withstand pressures of up to 200 bar in a thermostatically controlled cabinet with acetonitrile; even then, flexibility is compromised. To meet the growing need for bio-inertness, robustness, and higher operating pressures, Agilent has engineered a bio-inert PEEK liner clad with high-strength stainless steel to withstand pressures of at least 600 bar. This same technology is used in Agilent capillary fittings - giving you a strong, metal-free, capillary/connector flow path for bio-inert applications.



PEEK-coated fused silica (FS/PK): rugged and pliable

Since their introduction in the early 1980s, fused silica capillaries have become the industry standard for many GC and LC applications - as well as capillary electrophoresis. Agilent fused-silica capillaries are made from high-purity silicon dioxide, and coated with PEEK for strength, durability, and pliability.



PEEK (PK): durable and abrasion-resistant

Agilent PEEK capillaries are best for standard and bio-inert applications. PEEK (polyetheretherketone) is a thermoplastic polymer that resists mechanical and solvent damage, even at high temperatures. Because it is less vulnerable to corrosion than stainless steel, PEEK can be used in place of stainless steel when the capillary's external diameter is 1/16 inch or less. It also resists abrasion, making it an excellent coating for fused silica capillaries.

Tip: Use our color-coded PEEK fittings to track inlets and outlets of valves, columns, and detectors.

To learn more about Agilent LC capillary supplies, or to order now, visit www.agilent.com/chem/LCcapillaries

Agilent capillaries for routine applications

| Category | Applications | Internal diameter (mm) | Pressure limit (bar) | pH range | Comments |
|-----------------------------|--|---|----------------------|----------|--|
| Stainless steel | <ul style="list-style-type: none"> All capillary applications, except where bio-inertness is required 1/32 inch od designed for Agilent 1100 systems 1/16 and 1/8 inch od for most applications | 0.075 0.12 0.17 0.25 0.3 0.5 0.61 0.93 | 1300 | 1-14 | <ul style="list-style-type: none"> Flexible for easy routing Ready to use: cleaned and passivated to a high standard Precut capillaries are optimized for the lowest internal volume Use precut lengths to maintain zero-dead-volume performance |
| Titanium | <ul style="list-style-type: none"> Where ultimate bio-inertness is essential | 0.17 0.61 | 600 | 1-14 | |
| Stainless-steel-coated PEEK | <ul style="list-style-type: none"> Universal for standard and bio-inert applications UHPLC bio-inert applications | 0.17 | 600 | 1-14 | <ul style="list-style-type: none"> Metal-free flow path Robust Flexible Resists corrosion better than stainless steel |
| PEEK-coated fused silica | <ul style="list-style-type: none"> Industry standard for most LC applications | 0.025 0.050 0.075 0.100 0.125 | 690 | 1-10 | <ul style="list-style-type: none"> Mechanically strong Consistent, rigid flow path Ideal replacement for stainless steel To avoid permanent tube damage, always use precut lengths |
| PEEK | <ul style="list-style-type: none"> Most HPLC applications | 0.13 0.18 0.25 0.50 | 480* 200** | 1-14 | <ul style="list-style-type: none"> Smooth internal surface minimizes turbulence for improved resolution Flexible, easily cut to length Use with PEEK or stainless steel fittings Excellent solvent compatibility |

*At ambient temperature with water

**With acetonitrile at non-ambient temperature



Fittings for a strong, capillary flow path

Agilent offers more than 20 fitting varieties for Swagelok-type or metric M4/M3-type connections. Depending on your application, different materials must be used:

- Stainless steel or PEEK delivers permanent high-pressure sealing performance for connections such as valves, heaters, and columns
- Stainless steel ensures permanent high-pressure sealing and optimal performance throughout your LC system up to 1200 bar
- Finger-tight fittings (polymeric for 400 bar and polyketone for 600 bar) are a convenient option; They allow easy end fitting adjustment, so you can seat the capillary into the column properly, preventing extracolumn voids and leaks
- High-pressure fittings, which can be used with pressures up to 1200 bar, can be removed and replaced
- It is a good idea to use stainless steel nuts and ferrules for instrument connections, and PEEK nuts and ferrules for column and guard column connections, since these are changed most frequently

Agilent Fittings for Leak-Free Connections

| Fitting type | Advantages/tips |
|-----------------------------------|---|
| InfinityLab Quick Connect fitting | <ul style="list-style-type: none"> • Fast and easy connections • Finger-tight 1300 bar • Spring-loaded design for zero dead volume connections • Replaceable ferrule |
| InfinityLab Quick Turn fitting | <ul style="list-style-type: none"> • Finger-tight up to 400 bar, up to 1300 bar by using a wrench • Spring-loaded design for zero dead volume connections • Replaceable ferrule |
| Swagelok-type fittings | <ul style="list-style-type: none"> • Suitable for most connections • Available in a variety of combinations: • One piece or multiple pieces with nut + front and back ferrules • Stainless steel, PEEK, polyketone, or a stainless steel/PEEK combination |
| Metric M4/metric M3 | <ul style="list-style-type: none"> • For micro valve connections |
| Stainless steel | <ul style="list-style-type: none"> • At least 1200 bar • Most popular material for permanent, high-pressure sealing • Use our slitted socket wrench (p/n 8710-2391 or p/n 5023-0240) for optimal tightness |
| PEEK | <ul style="list-style-type: none"> • Up to 400 bar (at ambient temperature with water) • Easy, finger-tight column connections • Ideal for frequently changed connections, such as column connections • Pressure is less critical |
| Polyketone | <ul style="list-style-type: none"> • < 600 bar (600 bar pressure rating) • Easy, finger-tight column connections • Fits stainless steel tubing |

TIPS & TOOLS

Tips and tools for creating the best possible connections

See Page 125.

InfinityLab Quick Connect and Quick Turn fittings

Poorly connected fittings are one of the top reasons for broad or tailing peaks, loss of resolution, and overall poor chromatography. With Agilent InfinityLab Quick Connect fittings however, you can have complete confidence in your LC connections. The spring-loaded design, means that zero dead volume connections with LC columns are made as easily as pressing a lever. So no special training is needed, saving you time and trouble. InfinityLab Quick Connect fittings are long lasting, reseal tightly, and are stable up to 1300 bar (18,850 psi) even after 200+ reconnections. Which means they truly are reliable and reusable. Therefore, with InfinityLab Quick Connect fittings you can be sure that you are getting a perfect column connection, every time.

For harder to reach areas on your LC instrument, you can rely on InfinityLab Quick Turn fittings. Like the InfinityLab Quick Connect fittings, they use a proprietary spring-loaded design for zero dead volumes and a sure connection. Quick Turn fittings produce either a finger-tight connection (stable to 600 bar)—or a premium UHPLC connection (stable to 1300 bar) with a quick turn of the wrench.



Real stories from the lab.



TRUE STORY No. 7 ITS IN THE DETAILS

A lab manager initially resisted trying InfinityLab fittings because they cost more than traditional fittings. Then, a CrossLab expert helped him evaluate their true value for his lab.

Agilent
CrossLab
From Insight to Outcome

www.agilent.com/chem/story7

InfinityLab Quick Connect Assemblies

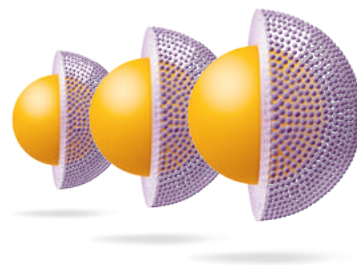
| Description | Part No. |
|---|-----------|
| Stainless steel, 0.075 x 105 mm with a Quick Turn fitting | 5067-6602 |
| Stainless steel, 0.075 x 105 mm | 5067-5961 |
| Stainless steel, 0.075 x 150 mm | 5067-6163 |
| Stainless steel, 0.075 x 220 mm | 5067-6164 |
| Stainless steel, 0.075 x 280 mm | 5067-6165 |
| Stainless steel, 0.12 x 105 mm | 5067-5957 |
| Stainless steel, 0.12 x 150 mm | 5067-5958 |
| Stainless steel, 0.12 x 220 mm | 5067-5959 |
| Stainless steel, 0.12 x 280 mm | 5067-5960 |
| Stainless steel, 0.17 x 105 mm | 5067-6166 |
| Stainless steel, 0.17 x 150 mm | 5067-6167 |
| Stainless steel, 0.17 x 220 mm | 5067-6168 |
| Stainless steel, 0.17 x 280 mm | 5067-6169 |
| Stainless steel 0.25 mm x 105 mm with a female connection | 5067-6210 |

Note: Each assembly is equipped with a capillary, a Quick Connect fitting or a Quick Turn fitting where specified, and a Swagelok fitting or a female connection where specified

DID YOU KNOW?

Agilent InfinityLab Poroshell 120 columns are available in 12 different chemistries across 3 particle sizes (1.9 μm , 2.7 μm , 4 μm), for maximum flexibility in method development and method transfer across all LC systems.

See **Pages 128–131** to learn more.



InfinityLab Quick Connect Fittings

| Description | Part Number |
|--|-------------|
| Capillaries for InfinityLab Quick Connect fitting | |
| Capillary, stainless steel, 0.12 x 280 mm | 5500-1170 |
| Capillary, stainless steel, 0.12 x 220 mm | 5500-1171 |
| Capillary, stainless steel, 0.12 x 150 mm | 5500-1172 |
| Capillary, stainless steel, 0.12 x 105 mm | 5500-1173 |
| Capillary, stainless steel, 0.075 x 105 mm | 5500-1174 |
| Capillary, stainless steel, 0.075 x 150 mm | 5500-1175 |
| Capillary, stainless steel, 0.075 x 220 mm | 5500-1176 |
| Capillary, stainless steel, 0.075 x 250 mm | 5500-1177 |
| Capillary, stainless steel, 0.075 x 280 mm | 5500-1178 |
| Capillary, stainless steel, 0.12 x 400 mm | 5500-1179 |
| Capillary, stainless steel, 0.12 x 500 mm | 5500-1180 |
| Capillary, stainless steel, 0.17 x 105 mm | 5500-1181 |
| Capillary, stainless steel, 0.17 x 150 mm | 5500-1182 |
| Capillary, stainless steel, 0.17 x 220 mm | 5500-1183 |
| Capillary, stainless steel, 0.17 x 280 mm | 5500-1230 |
| Capillary, stainless steel, 0.17 x 500 mm | 5500-1231 |
| Capillary, stainless steel, 0.12 x 120 mm | 5500-1247 |
| Capillary, stainless steel, 0.17 x 120 mm | 5500-1248 |
| Capillary, stainless steel, 0.25 x 105 mm with a female connection | 5500-1258 |
| Capillary, stainless steel, 0.25 x 150 mm | 5500-1259 |
| Capillary, stainless steel, 0.25 x 400 mm | 5500-1260 |
| Capillary, stainless steel, 0.12 x 150 mm, M4 | 5500-1289 |
| Capillary, stainless steel, 0.17 x 150 mm, M4 | 5500-1291 |
| Fittings | |
| InfinityLab Quick Connect LC fitting | 5067-5965 |
| InfinityLab front ferrule | 5043-0924 |

Note: The InfinityLab Quick Connect fitting can only be equipped with an InfinityLab capillary specified in this table. The InfinityLab capillary is designed with a spring and a holder.



InfinityLab Quick Connect LC fitting, 5067-5965

InfinityLab Quick Turn Fittings

| Description | Part Number |
|---|-------------|
| Capillaries for InfinityLab Quick Turn fitting | |
| Capillary, stainless steel, 0.12 x 105 mm, long socket | 5500-1188 |
| Capillary, stainless steel, 0.12 x 150 mm, long socket | 5500-1189 |
| Capillary, stainless steel, 0.12 x 200 mm, long socket | 5500-1190 |
| Capillary, stainless steel, 0.12 x 280 mm, long socket | 5500-1191 |
| Capillary, stainless steel, 0.12 x 500 mm, long socket | 5500-1192 |
| Capillary, stainless steel, 0.17 x 105 mm, long socket | 5500-1193 |
| Capillary, stainless steel, 0.17 x 150 mm, long socket | 5500-1194 |
| Capillary, stainless steel, 0.17 x 200 mm, long socket | 5500-1195 |
| Capillary, stainless steel, 0.17 x 280 mm, long socket | 5500-1196 |
| Capillary, stainless steel, 0.17 x 500 mm, long socket | 5500-1197 |
| Capillary, stainless steel, 0.075 x 105 mm, long socket | 5500-1198 |
| Capillary, stainless steel, 0.12 x 130 mm, long socket, M4 | 5500-1200 |
| Capillary, stainless steel, 0.075 x 500 mm, long socket | 5500-1205 |
| Capillary, stainless steel, 0.075 x 250 mm, long socket | 5500-1206 |
| Capillary, stainless steel, 0.075 x 150 mm, long socket | 5500-1232 |
| Capillary, stainless steel, 0.12 x 180 mm, long socket | 5500-1233 |
| Capillary, stainless steel, 0.17 x 180 mm, long socket | 5500-1234 |
| Capillary, stainless steel, 0.17 x 380 mm, long socket | 5500-1235 |
| Capillary, stainless steel, 0.17 x 400 mm, long socket | 5500-1236 |
| Capillary, stainless steel, 0.17 x 700 mm, long socket | 5500-1237 |
| Capillary, stainless steel, 0.25 x 105 mm, long socket with a female connection | 5500-1261 |
| Capillary, stainless steel, 0.25 x 150 mm, long socket | 5500-1262 |
| Capillary, stainless steel, 0.25 x 400 mm, long socket | 5500-1263 |
| Capillary, stainless steel, 0.12 x 150 long socket, M4 | 5500-1288 |
| Capillary, stainless steel, 0.17 x 150 long socket, M4 | 5500-1290 |
| Fittings | |
| InfinityLab Quick Turn LC fitting | 5067-5966 |
| InfinityLab front ferrule | 5043-0924 |

Agilent 1260/1200/1100 Infinity Series System Capillaries

| From (A) | To (B) | Material | ID (mm) | Length (mm) | Fitting Type From | Fitting Type To | Notes | Part No. |
|--|-------------|----------|---------|-------------|-------------------|-----------------|--|-------------|
| Pump | Autosampler | SST | 0.17 | 900 | S | S | Preswaged on A | G1329-87300 |
| Pump | Autosampler | SST | 0.17 | 700 | S | S | Preswaged on A and B | G1312-87304 |
| Pump | Autosampler | SST | 0.17 | 600 | S | S | Preswaged on A | G1312-67305 |
| Pump | Autosampler | SST | 0.17 | 400 | S | S | Preswaged on A and B | G1312-87303 |
| Pump | Autosampler | SST | 0.17 | 380 | S | S | Preswaged on A and B | 01090-87306 |
| Manual injector | Column | SST | 0.17 | 180 | S | S | Preswaged on A | G1313-87305 |
| Manual Injector | TCC | SST | 0.17 | 500 | SH | S | Nonswaged on A and B | G1328-87600 |
| Heater | Column | SST | 0.17 | 90 | S | S | Nonswaged on A and B | G1316-87300 |
| Column | Detector | SST | 0.17 | 380 | S | S | Preswaged on A; thermal isolation | G1315-87311 |
| TCC/VWD | MS | SST | 0.12 | 500 | S | S | Preswaged on A | G1316-87309 |
| Column | VWD | PK | 0.17 | 600 | | | Finger-tight fittings not included (0100-1516, 2/pk) | 5062-8522 |
| Pump Purge Valve | Waste | PTFE | 1.3 | 5000* | | | No fitting needed | 5062-2461 |
| Detector | Waste | PTFE | 0.8 | 5000* | | | Finger-tight fittings not included (0100-1516, 2/pk) | 5062-2462 |
| VWD | Waste | PK | 0.25 | 500 | | | Finger-tight fittings not included (0100-1516, 2/pk) | 5062-8535 |
| Autosampler | TCC | SST | 0.12 | 180 | S | S | Preswaged on A; can also be connected to low dispersion heat exchanger | G1313-87304 |
| Thermostatted Autosampler | TCC | SST | 0.12 | 280 | S | S | Preswaged on A; can also be connected to low dispersion heat exchanger | 01090-87610 |
| TCC | Column | SST | 0.12 | 105 | S | S | Preswaged on A | 01090-87611 |
| Column | DAD | SST | 0.12 | 150 | S | S | Preswaged on A | G1315-87312 |
| Female adapter for connecting long columns | | SST | 0.17 | 150 | S | | In addition to G1315-87311 | G1315-87303 |

*Capillary is intended to be cut to the right length for your need.

**Calibration capillary assembly

Material

| Key | Description |
|------|------------------------------------|
| SST | Stainless steel |
| PK | PEEK |
| PTFE | PTFE |
| FS | Fused silica |
| S | Swagelok 1.6 mm port id |
| SL | Swagelok 1.6 mm port id, long |
| SH | Swagelok 1.6 mm port id, long head |
| U | Female Swagelok fitting |
| M | Metric M4 0.8 mm port id |

LC CAPILLARIES



Finger-tight PEEK fitting (SPF), 0100-1516



Stainless steel fittings (S), 5062-2418



Stainless steel back ferrule, 5180-4114



Stainless steel fittings (S),
5062-2418



Finger-tight PEEK fitting (SPF),
0100-1516



PEEK fittings, plugs (MP),
5065-4410

Material

| Key | Description |
|------|-------------------------|
| SST | Stainless steel |
| S | Swagelok 1.6 mm port id |
| PK | PEEK |
| PTFE | PTFE |

Agilent 1290 Infinity Series System Capillaries

| From (A) | To (B) | Material | ID (mm) | Length (mm) | Fitting Type From | Fitting Type To | Notes | Part No. |
|-----------------|---------------------------|----------|---------|-------------|-------------------|-----------------|--|-----------|
| Pump | Autosampler | SST | 0.17 | 300 | S | S | Preswaged on A and B | 5067-4657 |
| Pump | Thermostatted autosampler | SST | 0.17 | 450 | S | S | Preswaged on A and B | 5067-4658 |
| Autosampler | TCC | SST | 0.12 | 340 | S | S | Preswaged on A | 5067-4659 |
| Column | DAD | SST | 0.12 | 220 | S | S | Preswaged on A | 5067-4660 |
| 1290 System | CTC Autosampler | SST | 0.17 | 600 | S | SH | Preswaged on A | 5067-4670 |
| CTC Autosampler | Column | SST | 0.12 | 600 | S | SL | Nonswaged on A and B | 5067-4669 |
| Detector | Waste | PTFE | 0.8 | 5000* | | | Finger-tight fittings not included (0100-1516, 2/pk) | 5062-2462 |

Agilent 1200 and 1100 Preparative LC Systems

| From | To | Material | ID (mm) | Length (mm) | Fitting Type From | Fitting Type To | Notes | Part No. |
|-----------------------|-------------|----------|---------|-------------|-------------------|-----------------|----------------------|-------------|
| Preparative isocratic | Autosampler | SST | 0.6 mm | 400 mm | S | S | Preswaged on A and B | G1361-67302 |
| Autosampler | Column | SST | 0.5 mm | 600 mm | S | S/SX | | G2260-87300 |
| Autosampler | Column | SST | 0.5 mm | 400 mm | S | SH | | G2260-87301 |

Agilent 1220/1120 Infinity Series LC

| From | To | Material | ID (mm) | Length (mm) | Fitting Type From | Fitting Type To | Notes | Part No. |
|-----------------|-------------|----------|---------|-------------|-------------------|-----------------|--|-------------|
| Pump | Autosampler | SST | 0.17 mm | 380 mm | S | S | Preswaged on A and B | 01090-87306 |
| Manual injector | Column | SST | 0.17 mm | 180 mm | S | S | Preswaged on A | G1313-87305 |
| Heater | Column | SST | 0.17 mm | 90 mm | S | S | Nonswaged on A and B | G1316-87300 |
| Column | Detector | SST | 0.17 mm | 380 mm | S | S | Preswaged on A; thermal isolation | G1315-87311 |
| VWD | Waste | PK | 0.25 mm | 500 mm | | | Finger-tight fittings not included (0100-1516, 2/pk) | 5062-8535 |
| Detector | Waste | PTFE | 0.8 mm | 5000 mm | | | Finger-tight fittings not included (0100-1516, 2/pk) | 5062-2462 |

1260 Infinity II System Capillaries

| From (A) | To (B) | Material | ID (mm) | Length (mm) | Fitting Type From | Fitting Type To | Notes | Part No. |
|-------------------------------|---|----------|---------|-------------|-------------------|-----------------|---------------------------------------|-----------|
| Pump | Vialsampler/ Multisampler | SST | 0.17 | 500 | SI | SI | Preswaged on A and B | 5500-1246 |
| Multisampler | Multi column compartment | | | | | | | |
| Pump | Vialsampler (with ICC) Multisampler (dual stack configuration) | SST | 0.17 | 900 | SI | SI | Preswaged Dual stack configuration | 5500-1217 |
| Multisampler | Multi column compartment | SST | 0.12 | 500 | SL | SI | Preswaged on A and B | 5500-1157 |
| Vialsampler | Integrated column compartment | SST | 0.17 | 105 | SL | SL | Preswaged on A and B | 5500-1240 |
| Integrated column compartment | Column | SST | 0.17 | 120 | SL | SL | Preswaged on A | 5500-1250 |
| Column | DAD | SST | 0.12 | 280 | | | | 5500-1191 |
| Column | VWD | PK | 0.17 | 600 | | | | 5062-8522 |

1290 Infinity II System Capillaries

| From (A) | To (B) | Material | ID (mm) | Length (mm) | Fitting Type From | Fitting Type To | Notes | Part No. |
|-------------------------------|-------------------------------|----------|---------|-------------|-------------------|-----------------|----------------------|-----------|
| Pump | Sampler | SST | 0.17 | 500 | SI | SI | | 5500-1246 |
| Pump | Vialsampler with ICC | SST | 0.17 | 900 | SI | SI | | 5500-1217 |
| Multisampler | Multi column compartment | SST | 0.12 | 500 | SL | SI | Preswaged on A and B | 5500-1157 |
| Vialsampler | Integrated column compartment | SST | 0.12 | 105 | SL | SL | Preswaged on A and B | 5500-1238 |
| Integrated Column Compartment | Column | SST | 0.12 | 120 | SL | SL | Preswaged on A | 5500-1249 |
| Column | DAD | SST | 0.12 | 280 | | | | 5500-1191 |
| Column | VWD | PK | 0.17 | 600 | | | | 5062-8522 |

Note: For column connect capillaries check for the InfinityLab fittings and capillaries on **Pages 103–106**

Agilent Infinity 1260 Bio-inert LC System Capillaries

| From (A) | To (B) | Material | id (mm) | Length (mm) | Fitting Type (A) | Fitting Type (B) | Notes | Part No. |
|-----------------------------|-----------------------------|----------|---------|-------------|------------------|------------------|-------------------------------------|-------------|
| Autosampler injection valve | Heat exchanger/column | PK/SST | 0.17 | 400 | RLO | RLO | Nonswaged | G5667-81004 |
| Manual injection valve | Heat exchanger/column | PK/SST | 0.17 | 500 | RLO | RLO | Nonswaged | G5667-81005 |
| Autosampler injection valve | Autosampler analytical head | Ti | 0.17 | 160 | SLB | SV | Preswaged on A | G5611-60503 |
| Damper | Pump head | Ti | 0.6 | 234 | SLB | SLB | For pump only. Preswaged on A and B | G5611-67301 |
| Outlet ball valve | Damper | Ti | 0.6 | 248 | SLB | SLB | For pump only. Preswaged on A and B | G5611-67300 |
| | | PK/SST | 0.17 | 105 | SLB | SLB | Nonswaged | G5667-81000 |
| | | PK/SST | 0.17 | 150 | SLB | SLB | Nonswaged | G5667-81001 |
| | | PK/SST | 0.17 | 200 | SLB | SLB | Nonswaged | G5667-81002 |
| | | PK/SST | 0.17 | 300 | SLB | SLB | Nonswaged | G5667-81003 |
| | | PK/SST | 0.17 | 400 | SLB | SLB | Nonswaged | G5667-81004 |

Material

| Key | Description |
|--------|---|
| SST | Stainless steel |
| PK | PEEK |
| PK/SST | PEEK and stainless steel |
| Ti | Titanium |
| S | Swagelok 1.6 mm port id |
| U | Female Swagelok fitting |
| SI | Swagelok 1.6 mm port id, intermediate |
| SL | Swagelok 1.6 mm port id, long |
| SLB | Swagelok 1.6 mm port id, long bio |
| SV | Swagelok 1.6 mm port id, 1200 bar |
| SLV | Swagelok 1.6 mm port id, long, 1200 bar |
| SX | Swagelok 1.6 mm port id, extra-long |
| RLO | UHP-FF fitting, bio-inert |



Titanium fitting (SLB), G5611-60502



Capillary, PK/SST, G5667-81000

Agilent Infinity II 1260 Bio-inert LC System Capillaries

| From (A) | To (B) | Material | id (mm) | Length (mm) | Fitting Type (A) | Fitting Type (B) | Notes | Part No. |
|------------------------------|---|----------|---------|-------------|------------------|------------------|--|-------------|
| Pump | Multisampler | Ti | 0.17 | 500 | SLB | SLV | | 5500-1264 |
| Multisampler | Heat exchanger/ column | PK/SST | 0.17 | 500 | RLO | RLO | Nonswaged | G5667-81005 |
| Manual injector valve | | | | | | | | |
| Column selection valve | Column (if not using heat exchanger) | PK/SST | 0.17 | 280 | | | | 5500-1276* |
| Multisampler | Column (if not using heat exchanger) | PK/SST | 0.17 | 500 | | | | 5500-1277* |
| Column thermostat/ column | Detector | PK | 0.18 | 1500 | | | Nonswaged | 0890-1763 |
| Detector | Fraction collector | PTFE-ESD | 0.25 | | | | | G5664-68712 |
| Damper | Pump head | Ti | 0.6 | 234 | SLB | SLB | For pump only. Preswaged on A and B | G5611-67301 |
| Outlet ball valve | Damper | Ti | 0.6 | 248 | SLB | SLB | For pump only. Preswaged on A and B | G5611-67300 |
| | | PK/SST | 0.17 | 105 | RLO | RLO | Nonswaged | G5667-81000 |
| | | PK/SST | 0.17 | 150 | RLO | RLO | Nonswaged | G5667-81001 |
| | | PK/SST | 0.17 | 200 | RLO | RLO | Nonswaged | G5667-81002 |
| | | PK/SST | 0.17 | 300 | RLO | RLO | Nonswaged | G5667-81003 |
| | | PK/SST | 0.17 | 400 | RLO | RLO | Nonswaged | G5667-81004 |

*For use with InfinityLab Quick Connect fitting at one end

TIPS & TOOLS

For more information on bio-inert capillaries and fittings, enter 5991-7469EN at
www.agilent.com/search



**BIO
INERT**

UHP-FF fitting, bio-inert (RLO), 5067-5695

Stainless Steel Capillaries with Fittings

| Material | id (mm) | Length (mm) | Fitting Type From (A) | Fitting Type To (B) | od (mm) A* | od (mm) B* | Notes | Part No. |
|----------|------------|----------------|--------------------------------|------------------------------|------------------|------------------|-----------------------|-------------|
| SST | 0.12 | 50 | S | U | 1.6 | | | G1316-87312 |
| SST | 0.12 | 60 | S | S | 1.6 | 1.6 | Preswaged on A and B | 79841-87610 |
| SST | 0.12 | 70 | S | S | 1.6 | 1.6 | | G1316-87303 |
| SST | 0.12 | 70 | S | U | 1.6 | | | G1316-87313 |
| SST | 0.12 | 75 | S | M | 1.6 | 0.8 | | G1316-87306 |
| SST | 0.12 | 90 | S | U | 1.6 | | | G1316-87314 |
| SST | 0.12 | 90 | S | SX | 1.6 | 1.6 | | 5067-4685 |
| SST | 0.12 | 100 | M | M | 0.8 | 0.8 | | G1316-27301 |
| SST | 0.12 | 120 | SX | SX | 1.6 | 1.6 | | 5067-4688 |
| SST | 0.12 | 170 | S | S | 1.6 | 1.6 | | G1316-87316 |
| SST | 0.12 | 170 | S | M | 1.6 | 0.8 | Preswaged on A and B | 5500-1270 |
| SST | 0.12 | 210 | S | S | 1.6 | 1.6 | | G1316-87317 |
| SST | 0.12 | 300 | S | S | 1.6 | 1.6 | | G1316-87318 |
| SST | 0.12 | 340 | S | S | 1.6 | 1.6 | | G1316-87319 |
| SST | 0.12 | 340 | S | M | 1.6 | 0.8 | Preswaged on A | G1316-87305 |
| SST | 0.12 | 340 | SL | M | 1.6 | 0.8 | Preswaged on B | 5500-1286 |
| SST | 0.12 | 500 | M | M | 0.8 | 0.8 | Preswaged on A and B | 5500-1305 |
| SST | 0.12 | 700 | M | M | 0.8 | 0.8 | Preswaged on A and B | 5500-1306 |
| SST | 0.12 | 2000 | U | U | | | Restriction capillary | 5022-2159 |
| SST | 0.17 | 105 | S | S | 1.6 | 1.6 | | G1316-87321 |
| SST | 0.17 | 105 | S | S | 1.6 | 1.6 | Preswaged on A and B | G1312-87306 |
| SST | 0.17 | 150 | S | S | 1.6 | 1.6 | Preswaged on A and B | G1312-87305 |
| SST | 0.17 | 150 | M | M | 0.8 | 0.8 | | 5067-4737 |
| SST | 0.17 | 170 | S | S | 1.6 | 1.6 | | G1316-87323 |
| SST | 0.17 | 250 | S | S | 1.6 | 1.6 | Preswaged on A and B | G1367-87304 |
| SST | 0.17 | 280 | S | S | 1.6 | 1.6 | Preswaged on A | 01090-87304 |
| SST | 0.17 | 280 | SX | S | 1.6 | 1.6 | Preswaged on A and B | 5067-4608 |
| SST | 0.17 | 280 | SX | SX | 1.6 | 1.6 | Preswaged on A and B | 5067-4607 |
| SST | 0.17 | 280 | SX | S | 1.6 | 1.6 | Preswaged on A and B | 5067-4608 |
| SST | 0.17 | 500 | SX | SH | 1.6 | 1.6 | Preswaged on A | 5067-4609 |
| SST | 0.17 | 500 | M | M | 0.8 | 0.8 | Preswaged on A and B | 5500-1346 |
| SST | 0.17 | 700 | S | SX | 1.6 | 1.6 | Preswaged on A and B | 5067-4648 |
| SST | 0.17 | 700 | M | M | 0.8 | 0.8 | Preswaged on A and B | 5500-1347 |
| SST | 0.17 | 700 | SL | M | 1.6 | 0.8 | Preswaged on A | 5067-5120 |
| SST | 0.17 | 800 | S | S | 1.6 | 1.6 | Preswaged on A | 01048-87302 |
| SST | 0.17 | 800 | SL | S | 1.6 | 1.6 | Preswaged on A | 01078-87305 |

*1.6 mm = 1/16 in

Stainless Steel Capillaries without Fittings

| Material | id (mm) | Length (mm) | od (mm) A* | od (mm) B* | Part No. |
|----------|---------|-------------|------------|------------|-----------|
| SST | 0.12 | 105 | 1.6 | 1.6 | 5021-1820 |
| SST | 0.12 | 150 | 1.6 | 1.6 | 5021-1821 |
| SST | 0.12 | 200 | 1.6 | 1.6 | 5065-9935 |
| SST | 0.12 | 280 | 1.6 | 1.6 | 5021-1822 |
| SST | 0.12 | 400 | 1.6 | 1.6 | 5021-1823 |
| SST | 0.12 | 500 | 1.6 | 1.6 | 5065-9964 |
| SST | 0.17 | 105 | 1.6 | 1.6 | 5021-1816 |
| SST | 0.17 | 150 | 1.6 | 1.6 | 5021-1817 |
| SST | 0.17 | 200 | 1.6 | 1.6 | 5065-9931 |
| SST | 0.17 | 280 | 1.6 | 1.6 | 5021-1818 |
| SST | 0.17 | 400 | 1.6 | 1.6 | 5021-1819 |
| SST | 0.17 | 400 | 1.6 | 1.6 | 5021-1819 |
| SST | 0.17 | 600 | 1.6 | 1.6 | 5065-9933 |
| SST | 0.17 | 700 | 1.6 | 1.6 | 5065-9932 |
| SST | 0.17 | 900 | 1.6 | 1.6 | 5065-9963 |

*1.6 mm = 1/16 in

TIPS & TOOLS**Agilent LC Handbook****Your complete guide to method development and more**

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Capillary Kits

Capillary and Fittings Kits

| Description | Contents | Part No. |
|---|---|-----------|
| InfinityLab capillary kit, for 1260 Infinity II | Kit includes: | 5067-6614 |
| | ZDV union, stainless steel, 2/pk | |
| | Tubing, PTFE, 0.7 mm id, 1.6 mm od, 5 m | |
| | Fitting, PEEK, finger-tight, 1/16 inch, mixed colors, 10/pk | |
| | Capillary, stainless steel, 0.12 x 280 mm, 2/pk | |
| | Quick Connect assembly, stainless steel, 0.17 x 105 mm | |
| | Capillary, stainless steel, 0.17 x 105 mm | |
| | Quick Turn fitting | |
| | Replacement ferrule, for Quick Connect/Quick Turn fitting, 5/pk | |
| | Capillary, stainless steel, 0.17 x 500 mm, 2/pk | |
| | Capillary, stainless steel, 0.17 x 900 mm | |
| | Capillary, stainless steel, 0.17 x 120 mm | |
| | Blank nut, PEEK, with stainless steel core | |
| | Capillary, stainless steel, 2 m, 0.12 mm id, ferrule | |
| InfinityLab capillary kit, for 1290 Infinity II | Kit includes: | 5067-6615 |
| | ZDV union, stainless steel, 2/pk | |
| | Tubing, PTFE, 0.7 mm id, 1.6 mm od, 5 m | |
| | Fitting, PEEK, finger-tight, 1/16 inch, mixed colors, 10/pk | |
| | Stainless steel capillary, 0.12 x 280 mm, 2/pk | |
| | InfinityLab Quick Connect assembly, stainless steel, 0.12 x 105 mm | |
| | Capillary, stainless steel, 0.12 x 105 mm | |
| | InfinityLab Quick Turn fitting | |
| | Replacement ferrule, for InfinityLab Quick Connect/Quick Turn fitting, 5/pk | |
| | Capillary, stainless steel, 0.17 x 300 mm, 2/pk | |
| | Capillary, stainless steel, 0.17 x 900 mm | |
| | Capillary, stainless steel, 0.12 x 120 mm | |
| | Capillary, stainless steel, 0.12 x 500 mm | |
| | Blank nut, PEEK, with stainless steel core | |
| | Capillary, stainless steel, 0.12 mm id, 2 m, ferrule | |

(Continued)

Capillary and Fittings Kits

| Description | Contents | Part No. |
|---|--|-----------------|
| Bio-inert capillary kit, for 1260 Infinity II | Kit includes: Capillary, titanium, 0.17 x 500 mm, SL-SLV Capillary, PEEK/stainless steel, 0.17 x 500 mm Capillary, PEEK/stainless steel, 0.17 x 300 mm, RLO/RLO BIO Quick Connect fitting, standalone Union, bio-inert, 2/pk Front ferrule, 5/pk Blank nut, long 10-32 Tubing, PEEK, 0.18 mm, 5 m Fittings, colored, finger-tight, PEEK, 10/pk Mounting tool for UHP-FF fitting UHP-FF fitting, 2/pk | 5067-6621 |
| Capillary/fitting starter kit, for 1100 Capillary LC System multi-use kit, a collection of various capillaries and tools for use in the lab | Kit includes: Capillary, fused silica/PEEK, 50 µm, 55 cm, 2/pk Capillary, fused silica/PEEK, 50 µm, 20 cm Capillary, fused silica/PEEK, 100 µm, 110 cm Capillary, fused silica/PEEK, 50 µm, 50 cm, 2/pk Capillary, fused silica/PEEK, 50 µm, 40 cm, 2/pk Fitting, male 10-32, stainless steel, 4 mm, 4/pk Ferrule, PEEK, 1/32 inch, and lock ring, stainless steel, 4/pk Fittings, PEEK, for µ-valves, 4/pk Nuts, double winged, PEEK, and ferrules, 1/32 inch, 4/pk Cybertool | 5065-9938 |

(Continued)

Cybertool

Capillary and Fittings Kits

| Description | Contents | Part No. |
|---|---|-----------|
| Capillary/fitting starter kit, 0.12 mm id multi-use kit, a collection of various capillaries and tools for use in the lab | Kit includes: | 5065-9937 |
| | Capillary, PEEK, 0.13 mm id, 1.5 m | |
| | Capillary, stainless steel, 0.12 x 105 mm, 4/pk | |
| | Capillary, stainless steel, 0.12 x 150 mm, 4/pk | |
| | Capillary, stainless steel, 0.12 x 170 mm, 2/pk | |
| | Capillary, stainless steel, 0.12 x 200 mm, 2/pk | |
| | Capillary, stainless steel, 0.12 x 220 mm, 2/pk | |
| | Capillary, stainless steel, 0.12 x 280 mm, 2/pk | |
| | Capillary, stainless steel, 0.12 x 400 mm | |
| | ZDV union, stainless steel, 3/pk | |
| | Tubing cutter, for PEEK capillaries | |
| | Fittings, stainless steel, 1/16 inch, 10/pk | |
| | Fittings, PEEK, color, 1/16 inch, 10/pk | |
| | Fittings, PEEK, 1/16 inch, 10/pk | |
| | Rheotool | |
| | Cybertool | |
| Capillary/fitting starter kit, 0.17 mm id multi-use kit, a collection of various capillaries and tools for use in the lab | Kit includes: | 5065-9939 |
| | Capillary, PEEK, 0.18 mm id, 1.5 m | |
| | Capillary, stainless steel, 0.17 x 105 mm, 4/pk | |
| | Capillary, stainless steel, 0.17 x 150 mm, 4/pk | |
| | Capillary, stainless steel, 0.17 x 200 mm, 2/pk | |
| | Capillary, stainless steel, 0.17 x 280 mm, 2/pk | |
| | Capillary, stainless steel, 0.17 x 400 mm | |
| | ZDV union, stainless steel, 3/pk | |
| | Tubing cutter, for PEEK capillaries | |
| | Fittings, stainless steel, 1/16 inch, 10/pk | |
| | Fittings, PEEK, color, 1/16 inch, 10/pk | |
| | Fittings, PEEK, 1/16 inch, 10/pk | |
| | Rheotool | |
| | Cybertool | |



Capillary/fitting starter kit 0.17 mm id, 5065-9939

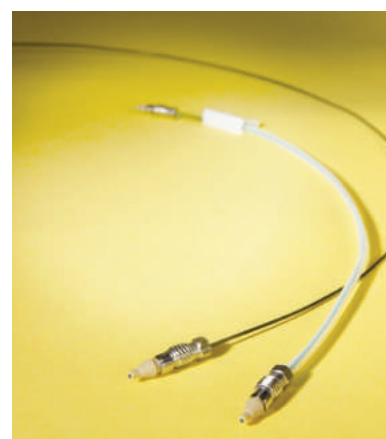
PEEK-coated Fused Silica Capillaries

PEEK-coated Fused Silica Capillaries for Nano LC

| From (A) | To (B) | Material | id (µm) | Length (mm) | Fitting Type From | Fitting Type To | Part No. |
|-----------------|-----------------------------|----------|---------|-------------|-------------------|-----------------|-------------|
| Switching valve | Column | FS/PEEK | 25 | 100 | MP | WPF | G1375-87320 |
| EMPV | Flow sensor | FS/PEEK | 25 | 220 | WG | MP/WG | G1375-87321 |
| Flow sensor | Injection valve | FS/PEEK | 25 | 350 | MP/WG | MP | G1375-87322 |
| Switching valve | Column | FS/PEEK | 25 | 550 | MP | WPF | G1375-87323 |
| Switching valve | Column | FS/PEEK | 25 | 700 | MP | WPF | G1375-87324 |
| Switching valve | Column | FS/PEEK | 50 | 100 | MP | WPF | G1375-87325 |
| Injection valve | Injector seat / second pump | FS/PEEK | 75 | 650 | MP | WG/WPF | G1375-87327 |

PEEK-coated Fused Silica Capillaries – 20 µL/min Flow

| From (A) | To (B) | Material | id (µm) | Length (mm) | Fitting Type From | Fitting Type To | Part No. |
|----------------------|-----------------|----------|---------|-------------|-------------------|-----------------|-------------|
| EMPV | Flow sensor | FS/PEEK | 50 | 220 | WG | WG | G1375-87301 |
| Flow sensor | Injection valve | FS/PEEK | 50 | 550 | WG | MP | G1375-87310 |
| Injection valve | Metering device | FS/PEEK | 50 | 200 | MP | WG | G1375-87302 |
| Injection valve | Column | FS/PEEK | 50 | 500 | MP | WPF | G1375-87304 |
| Column | Detector | FS/PEEK | 50 | 400 | WPF | | G1315-68703 |
| Detector | Waste | FS/PEEK | 75 | 700 | SG | WPF | G1315-68708 |
| Microswitching valve | Column | FS/PEEK | 50 | 280 | MP | WPF | G1375-87309 |
| | | FS/PEEK | 50 | 700 | | | G1375-87319 |



PEEK-coated Fused Silica Capillaries – 100 µL/min Flow

| From (A) | To (B) | Material | id (µm) | Length | Fitting Type From | Fitting Type To | Part No. |
|----------------------|-----------------|----------|---------|--------|-------------------|-----------------|-------------|
| EMPV | Flow sensor | FS/PEEK | 100 | 220 | WG | WG | G1375-87305 |
| Flow sensor | Injection valve | FS/PEEK | 100 | 550 | WG | MP | G1375-87306 |
| Injection valve | Metering device | FS/PEEK | 100 | 200 | MP | WG | G1375-87312 |
| Injection valve | Column | FS/PEEK | 75 | 500 | MP | WPF | G1375-87311 |
| Column | Detector | FS/PEEK | 75 | 400 | WPF | | G1375-87308 |
| Detector | Waste | FS/PEEK | 75 | 700 | | | G1315-68708 |
| Microswitching valve | Column | FS/PEEK | 50 | 280 | MP | WPF | G1375-87309 |

Material

| Key | Description |
|---------|---|
| FS/PEEK | Fused silica/PEEK |
| W | Swagelok 0.8 mm port id |
| WG | Swagelok 0.8 mm port id, small head SW 4 mm |
| MP | Metric M4 0.8 mm port id, PEEK |
| WPF | Swagelok 0.8 mm port id, PEEK, finger-tight |



Stainless steel screw, 5063-6593



PEEK fittings, plugs (MP), 5065-4410



Double winged PEEK nut & ferrule (WPF), 5065-4422



Ferrule and stainless steel lock ring (W), 5065-4423

Tubing

PEEK Tubing

- Flexible and easy to cut to desired lengths
- Color coded for easy tracking
- Accepts both stainless steel and PEEK fittings
- 1/16 inch (1.6 mm) od



Tubing, PEEK, 0890-1762

PEEK Tubing

| Description | Length | Color Code | Part No. |
|-------------|--------|------------|-----------|
| 0.5 mm | 1.5 m | Bone white | 0890-1761 |
| 0.25 mm | 1.5 m | Blue | 0890-1762 |
| 0.25 mm | 5 m | Blue | 5042-6463 |
| 0.18 mm | 1.5 m | Green | 0890-1763 |
| 0.18 mm | 5 m | Green | 5042-6462 |
| 0.13 mm | 1.5 m | Red | 0890-1915 |
| 0.13 mm | 5 m | Red | 5042-6461 |

Other Tubing

| Description | Length (m) | id (mm) | od(mm) | Part No. |
|--|------------|---------|--------|-----------|
| Tubing, PTFE, FEP, primary use for valve solutions | 5 m | 0.7 mm | 1.6 mm | 5062-2462 |
| Solvent tubing, PTFE, primary use for flow path from solvent bottle to degasser, to pump | 5 m | 1.5 mm | 3.1 mm | 5062-2483 |
| Corrugated tubing, polypropylene | 5 m | 6.5 mm | | 5062-2463 |
| Silicone tubing | 5 m | 1 mm | 3 mm | 5065-9978 |
| Clamps and micro clamps, 10/pk | | | | 5065-9976 |
| Barbed Y-connector PP for 3/16 in id tube, 10/pk | | | | 5065-9971 |

(Continued)



Tubing, PTFE, 5062-2462

Other Tubing

| Description | Length (m) | id (mm) | od(mm) | Part No. |
|--|------------|---------|--------|-------------|
| For G2258A 1100/1200 Series Dual Loop Autosampler | | | | |
| Front seat tube, stainless steel | 0.1 m | 0.5 mm | | G2258-87316 |
| Back seat tube, stainless steel | 0.12 m | 0.5 mm | | G2258-87315 |
| Front seat tube, PTFE | 0.1 m | 0.2 mm | | G2258-87312 |
| Back seat tube, PTFE | 0.12 m | 0.25 mm | | G2258-87313 |
| Waste tube | 0.15 m | 0.8 mm | | G2258-87310 |
| Drawing tube assembly for flush solvent | | | | G2258-87307 |
| Tubing assembly, solvent flush | | | | G2258-87314 |
| For G1313/27/29A 1100/1200 Series Autosampler | | | | |
| Waste tube | | | | G1313-87300 |
| Corrugated tubing, polypropylene | 5 m | 6.5 mm | | 5062-2463 |
| For G1387A 1100/1200 Series Micro Autosampler | | | | |
| Waste tube, FEP | | 0.8 mm | 1.6 mm | G1375-87326 |

Accessories

| Description | Part No. |
|--|-------------|
| Plastic tubing cutter | 8710-1930 |
| Blades for plastic cutter, 5/pk | 8710-1931 |
| Fitting screws, stainless steel, 10-32, 4 mm, 5/pk | 5065-9948 |
| Ferrule, PEEK, and stainless steel ring, for 2.0 mm tube, 5/pk | 5065-9950 |
| Union, PEEK for 1/8 in od tubing | 0100-2410 |
| Waste adapter, 1200 Series autosamplers, gray | G1313-43216 |



Plastic tubing cutter, 8710-1930



Fitting screws, 5065-9948



PEEK ferrules and stainless steel rings, 5065-9950

Fittings and Unions

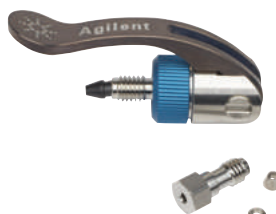
Fittings

| Description | Key | Unit | Part No. |
|---|-----|-------|-----------|
| InfinityLab Quick Turn LC fitting | | | 5067-5966 |
| InfinityLab Quick Connect LC fitting | | | 5067-5965 |
| InfinityLab front ferrule | | | 5043-0924 |
| Swagelok, 1.6 mm, stainless steel fitting | S | 10/pk | 5062-2418 |
| Swagelok, 1.6 mm, stainless steel fitting, long screw | SL | 10/pk | 5065-4454 |
| Swagelok, 1.6 mm, stainless steel fitting, extra long screw | SX | 10/pk | 5065-9967 |
| Swagelok, 1.6 mm, screw | | 10/pk | 5061-3303 |
| Front ferrule, stainless steel, 1.6 mm | | 10/pk | 5180-4108 |
| Back ferrule, stainless steel, 1.6 mm | | 10/pk | 5180-4114 |
| Swagelok, 1.6 mm, 1200 bar, removable fitting | SV | | 5067-4733 |
| Swagelok, 1.6 mm, 1200 bar, removable fitting, long screw | SLV | | 5067-4738 |
| Swagelok, 1.6 mm, 1200 bar, removable fitting, extra long screw | SXV | | 5067-4739 |

(Continued)

Material

| Key | Description |
|------|---|
| S | Swagelok 1.6 mm port id |
| SL | Swagelok 1.6 mm port id, long |
| SX | Swagelok 1.6 mm port id, extra-long |
| SV | Swagelok 1.6 mm port id, 1200 bar |
| SLV | Swagelok 1.6 mm port id, long, 1200 bar |
| SXV | Swagelok 1.6 mm port id, extra-long, 1200 bar |
| SPF | Swagelok 1.6 mm port id, PEEK, finger-tight |
| SPLF | Swagelok 1.6 mm port id, PEEK, long, finger-tight |



InfinityLab Quick Connect LC fitting, 5067-5965



Stainless steel fittings (S), 5062-2418



Stainless steel long fittings (SL), 5065-4454



Stainless steel extra long fitting (SX), 5065-9967



Stainless steel front ferrules, 5180-4108



Stainless steel back ferrule, 5180-4114



1200 bar removable fitting (SV), 5067-4733



1200 bar removable long fitting (SLV), 5067-4738



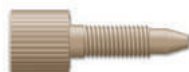
1200 bar removable extra long fitting (SXV), 5067-4739



PEEK fittings (SPF),
0100-1516/5063-6591



Finger-tight PEEK fitting (SPF),
0100-1516



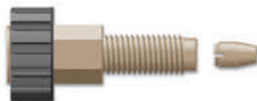
PEEK long fittings (SPLF), 5062-8541



Finger-tight PEEK fittings (SPF),
5065-4426



Double winged fitting (SPF),
5042-6500



PEEK RheFlex fittings (SPF),
0100-1631



PEEK RheFlex fittings (SPF),
0100-2175



Stainless steel blanking nut,
01080-83202



Blanking nut, stainless steel,
for M4 fittings ports, 5067-6141



Blank nut long, 10-32, PEEK/stainless
steel, 5043-0277

Fittings

| Description | Key | Unit | Part No. |
|---|------|-------|-------------|
| Swagelok, 1.6 mm, PEEK, finger-tight fitting | SPF | 10/pk | 5063-6591 |
| Swagelok, 1.6 mm, PEEK, finger-tight fitting | SPF | 2/pk | 0100-1516 |
| Swagelok, 1.6 mm, PEEK, long, finger-tight fitting | SPLF | 10/pk | 5062-8541 |
| Swagelok, 1.6 mm, PEEK, finger-tight fitting (mixed colors) | SPF | 10/pk | 5065-4426 |
| Swagelok, 1.6 mm, PEEK, finger-tight, double winged fitting | SPF | 10/pk | 5042-6500 |
| Swagelok, 1.6 mm, PEEK, finger-tight, RheFlex fitting | SPF | 5/pk | 0100-1631 |
| Swagelok, 1.6 mm, PEEK, finger-tight, RheFlex fitting (mixed colors) | SPF | 10/pk | 0100-2175 |
| Swagelok, 1.6 mm, stainless steel blanking nut | | | 01080-83202 |
| Blanking nut, stainless steel, for M4 fittings ports | | | 5067-6141 |
| Blanking nut, long, 10-32, PEEK with stainless steel core, finger-tight | | | 5043-0277 |

Fittings

| Description | Key | Unit | Part No. |
|--|------|---------------------|-----------|
| Swagelok, 1.6 mm, stainless steel screw, for PEEK ferrule 5067-1547 | S | 6/pk | 5067-1540 |
| Ferrule, PEEK, 1.6 mm, for screw 5067-1540 | SP | 6/pk | 5067-1547 |
| Swagelok, 1.6 mm, finger-tight polyketone fitting | SPF | 10/pk | 5042-8957 |
| M4 stainless steel screw, for stainless steel ferrule 5067-1557 | M | 6/pk | 5067-1558 |
| Ferrule, stainless steel, 0.8 mm, for 5067-1558 screw | M | 6/pk | 5067-1557 |
| Swagelok 1.6 mm plastic blank nut | M | | 0100-1259 |
| Swagelok 1.6 mm stainless steel screw, 4 mm head | G | 10/pk | 5063-6593 |
| Ferrule, PEEK, 0.8 mm, and stainless steel ring, for screw 5063-6593 | W | 10/pk | 5065-4423 |
| M4 fitting, PEEK, 0.8 mm | MP | 6 fittings, 2 plugs | 5065-4410 |
| Swagelok 0.8 mm finger-tight PEEK double winged fitting | WPF | 10/pk | 5065-4422 |
| Swagelok 0.8 mm finger-tight PEEK long fitting | WPFL | | 5022-6536 |
| Swagelok 2.0 mm stainless steel screw, 4 mm head | | 5/pk | 5065-9948 |
| Ferrule, PEEK, and stainless steel ring, for 2.0 mm tube | | 5/pk | 5065-9950 |

Material

| Key | Description |
|------|---|
| S | Swagelok 1.6 mm port id |
| SL | Swagelok 1.6 mm port id, long |
| SX | Swagelok 1.6 mm port id, extra-long |
| SV | Swagelok 1.6 mm port id, 1200 bar |
| SLV | Swagelok 1.6 mm port id, long, 1200 bar |
| SXV | Swagelok 1.6 mm port id, extra-long, 1200 bar |
| SPF | Swagelok 1.6 mm port id, PEEK, finger-tight |
| SPLF | Swagelok 1.6 mm port id, PEEK, long, finger-tight |



Stainless steel nut and PEEK ferrule, 5067-1540



Ferrule and stainless steel lock ring (W), 5065-4423



PEEK ferrule, 5067-1547



PEEK fittings, plugs (MP), 5065-4410



Finger-tight polyketone fitting (SPF), 5042-8957



Double winged PEEK nut and ferrule (WPF), 5065-4422



M4 stainless steel screw, 5067-1558



PEEK fitting, long (WPFL), 5022-6536



Stainless steel ferrule (M), 5067-1557



Plastic blank nut, 0100-1259



Fitting screws, 5065-9948



Stainless steel screw, 5063-6593



PEEK ferrules and SS rings, 5065-9950



ZDV union, 5022-2145



Adapter, PEEK, 0100-2298



ZDV universal union, 5022-2184



Barbed Y-connector PP, 5065-9971



ZDV union with fittings, 0100-0900



Union, female to female, 5042-8517



ZDV union, PEEK with fittings, 0100-2441



High flow union, 5022-2133



Adapter, male Luer to female, 5042-8518



PEEK adapter, 0100-1847



Adapter, female to male, 5023-1803



Bio-inert union, 600 bar, 5067-4741



Micro T-connector, PEEK, 5042-8519

Unions

| Description | Used With | Part No. |
|---|-------------------------|-----------|
| ZDV union, no fittings | Nano LC | 5022-2145 |
| ZDV universal union, stainless steel, no fittings | Standard LC | 5022-2184 |
| ZDV union, with fittings | Standard LC | 0100-0900 |
| ZDV union, PEEK with fittings | Bio-applications | 0100-2441 |
| High flow union, no fittings | Preparative LC | 5022-2133 |
| Adapter, PEEK, 1/4-28 to 10-32 | | 0100-1847 |
| Adapter, PEEK int. 1/4-28 to ext. 10-32 | | 0100-2298 |
| Barbed Y-connector PP for 3/16 in id tube, 10/pk | | 5065-9971 |
| Adapter, female 10-32 to female 1/4-28 | | 5042-8517 |
| Adapter, male Luer to female 1/4-28 | | 5042-8518 |
| Adapter, stainless steel, Swagelok to 1/4-28 | | 5023-1803 |
| T-connector, PEEK, swept volume 0.57 µL | For 1/16 inch od tubing | 5022-2144 |
| Micro T-connector, PEEK, swept volume 29 nL, with 1/32 inch id fittings | | 5042-8519 |
| Bio-inert union, stainless steel with PEEK insert 600 bar | Bio-applications | 5067-4741 |

Tips and tools for creating the best possible connections

How do I tighten fittings correctly?

The chart below describes the steps you will need to follow.

| Fitting type | First Connection | Further connection |
|---|---|--|
| InfinityLab Quick Connect fitting | <ol style="list-style-type: none"> 1. Insert capillary into the port and turn the blue ring until you feel the first resistance (overtightening will damage the fitting). 2. Close the lever. The connection is tight to 1300 bar. The InfinityLab Quick Connect LC fitting can be reconnected multiple times without loss of performance. | <p>Follow the same steps again.</p> <p>Ferrule can be replaced in case of damage, see p/n 5043-0924.</p> |
| InfinityLab Quick Turn fitting | <ol style="list-style-type: none"> 1. Insert capillary into port and turn the fitting until finger-tight. Depending upon the required pressure, you can tighten the fitting an extra ¼ turn to ½ turn with a wrench. | <p>Follow the same steps again.</p> <p>Ferrule can be replaced in case of damage, see p/n 5043-0924.</p> |
| Polymeric finger-tight: PEEK and polyketone | <ol style="list-style-type: none"> 1. Slide the screw and ferrule onto the capillary. 2. Insert capillary into the port until it is completely seated in the end fitting. 3. Finger-tighten the nut until the capillary does not rotate. 4. Make sure the capillary cannot be easily pulled out. | <p>Additional tightening if necessary</p> <p>See good connections step by step</p> |
| Stainless steel | <ol style="list-style-type: none"> 1. Slide the screw, along with the back and front ferrules, onto the capillary. 2. Insert capillary into the port until it is completely seated in the end fitting. 3. Finger-tighten the nut until the capillary does not rotate. 4. Tighten the nut ½ to ¾ turn with a slitted socket wrench or Rheotool (p/n 8710-2391). If you are using a torque wrench, tightening torque should be between 1.5 and 3.0 Nm) | <p>Finger-tighten, then tighten an extra ¼ to ½ turn with a slitted socket wrench or Rheotool (p/n 8710-2391). (If using a torque wrench, tightening torque should be between 1.5 and 3.0 Nm).</p> |
| 1200 bar removable fitting | <ol style="list-style-type: none"> 1. Slide the screw, along with the back and front ferrules, onto the capillary. 2. Insert capillary into the port until it is completely seated in the end fitting. 3. Finger-tighten the nut until the capillary does not rotate. 4. Tighten the nut about ¾ turn with a socket wrench. 5. For stainless steel capillaries, if using a torque wrench, tightening torque should be between 1.0 and 1.2 Nm. 6. For stainless steel coated PEEK capillaries, do not exceed 0.8 Nm. | <p>Finger-tighten, then tighten an extra ¼ to ½ turn with a socket wrench.</p> <p>For stainless steel capillaries, if using a torque wrench, tightening torque should be between 1.0 and 1.2 Nm.</p> <p>For stainless steel coated PEEK capillaries, if using a torque wrench, do not exceed 0.8 Nm.</p> |
| PEEK/stainless steel | <ol style="list-style-type: none"> 1. Slide the screw, along with the back and front ferrules, onto the capillary. 2. Insert capillary into the port until it is completely seated in the end fitting. 3. Finger-tighten the nut until the capillary does not rotate. 4. Tighten the nut about ½ turn with a socket wrench. | <p>Finger-tighten, then tighten an extra ¼ to ½ turn with a socket wrench.</p> |

Preparing the perfect fitting connection

Problems such as peak tailing, peak broadening, split peaks and carryover challenge chromatographers working with HPLC and UHPLC. One common cause for those problems that is often overlooked and costs much time in troubleshooting is poor tubing connection. Dead volume or micro-leakage in tubing connections can greatly affect the performance and reproducibility of chromatographic analysis, especially with modern UHPLC and Fast LC columns.

Fitting connection requirements

Fitting connections can have a large impact on the peak shape of analytes. An ideal fitting connection should feature:

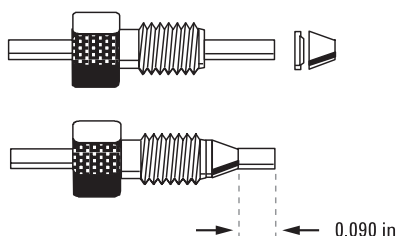
- Zero dead volume between tubing and receiving port
- Ability to remain free of leaks under ultrahigh pressures and elevated temperatures
- Robustness over long-term use, preventing tubing slippage
- Ease-of-use

Nonadjustable metallic fittings

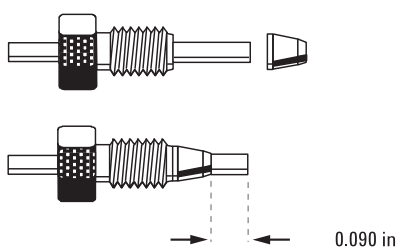
Most commonly used fittings in UHPLC are nonadjustable 2-piece or 3-piece metallic fittings, which are permanent and nonadjustable after they have been assembled. Since different manufacturers of column hardware use different designs for column end fittings, a new set of tubing and fittings should be swaged for every brand of column. This ensures that the stem length, namely the length between the bottom of the ferrule and the end of the tubing, is perfectly matched.

Fitting connection design varies between different column manufacturers, and improper stem length of the fitting could cause leaks or poor peak shape. If the stem length is too short, a dead volume is created, resulting in deterioration of peak shape, lower resolution, and carryover. If the stem length is too long, the ferrule will not seat properly and leakage will occur. In addition, conventional fittings and ferrules are often over tightened when wrenches are used, resulting in the fitting getting permanently stuck in the column.

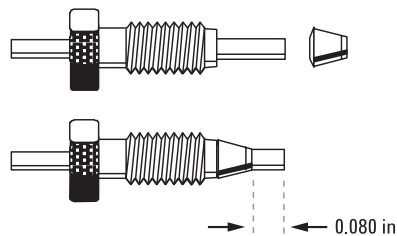
Swagelok



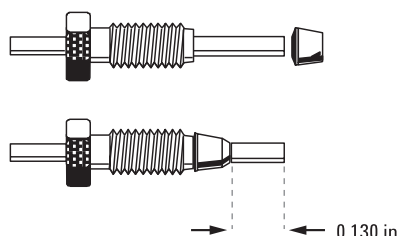
Parker



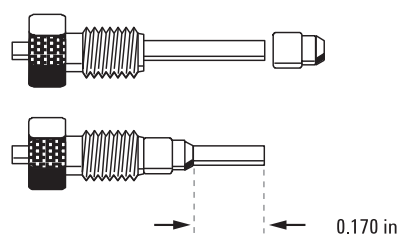
Valco



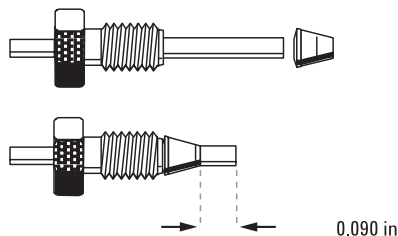
Waters (non-Acquity)



Rheodyne



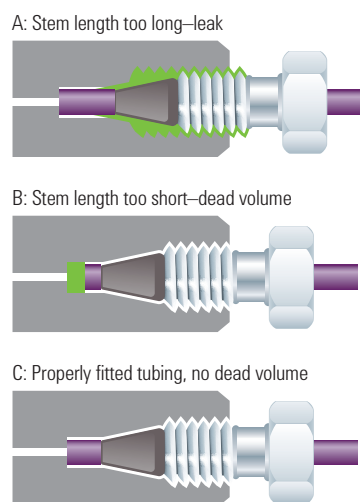
Upchurch (iDEX)



Adjustable finger-tight fittings

To solve the problems of conventional fittings, adjustable finger-tight fittings have been developed that are compatible with different columns. These fittings usually have polymer (for example, PEEK) ferrules, which make the fittings reusable because the ferrule is not permanently attached to the tubing. However, many of them still have some drawbacks, such as:

- The inability to reach 1300 bar ultrahigh pressures without tools
- The need to follow strict guidelines on the exact torque or range of turning angle to avoid over-tightening
- The need to check for leaks every time after reconnection
- The fitting often needs to be retightened
- The polymeric ferrule could slip off the receiving port at ultrahigh pressures or pressure cycling, leading to the creation of dead volume

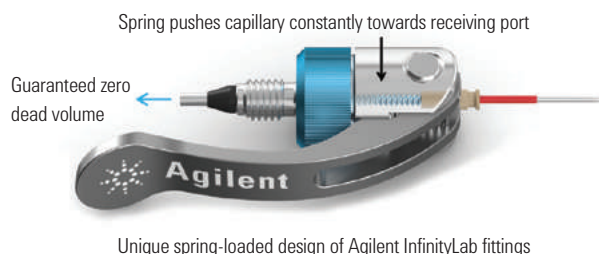


InfinityLab Quick Connect and Quick Turn fittings

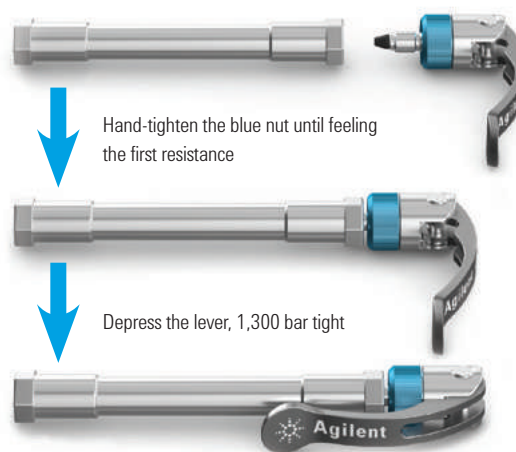
InfinityLab Quick Connect and Quick Turn fittings avoid these drawbacks, enabling a reproducible and leak-free column connection. The Quick Connect fitting is for column connections with 1300 bar sealability without the need for a wrench. The Quick Turn fitting is for various flowpath connections, including column inlet/outlet, valve, and other connections. This fitting seals up to 600 bar by finger tightening (depending on users and positions of connection) and up to 1300 bar with a wrench.

Both types of fittings have a novel spring-loaded design that constantly pushes the tubing against the receiving port, delivering a reproducible connection with no dead volume for consistent chromatographic performance. The stem length is adjustable through the spring, which makes both fittings compatible with all types of LC columns. In addition, the Quick Connect fitting has a unique lever actuated design, so that the spring assembly, including the lever, applies a constant force that presses the ferrule onto the tubing, avoiding tubing slippage. Little force is required to tighten the fitting to 1300 bar (18,850 psi) without any tools.

To find out more about InfinityLab fittings, turn to **Pages 103–106**.



Unique spring-loaded design of Agilent InfinityLab fittings



Installation of Agilent InfinityLab Quick Connect fitting

LC COLUMNS

Agilent InfinityLab LC columns deliver consistently high throughput and high-quality data, meaning that your lab can operate at peak efficiency.



InfinityLab Poroshell 120

InfinityLab Poroshell 120 columns are available in three different particle diameters allowing you to choose the size that best fits your separation needs. Because the different particles are engineered with a consistent core-to-particle size ratio, you can easily transfer a method developed on one particle size to any of the others.

InfinityLab Poroshell 120 columns provide exceptional efficiency, and significantly boost performance from all instruments, whether you have older 400 bar HPLC systems or newer 800 or 1300 bar UHPLC systems. Their advanced features include:

Excellent lot-to-lot reproducibility: A proprietary, single-step porous shell process dramatically reduces tiny differences between lots of columns, giving you confidence in your separation results.

A scalable family of particles: 1.9 μm , 2.7 μm , and 4 μm superficially porous particles enable you to get the best from your methods and instruments, and allow easy transfer between HPLC and UHPLC methods.

Easy method development: Up to *twelve* chemistries provide selectivity options for fast method development. What's more, alignment with ZORBAX chemistries makes it easier to transfer your methods.

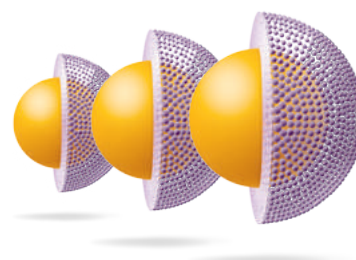
Long column life: Robust particles are stable at required pressures. In addition, 2.7 μm and 4 μm columns with standard 2 μm frits resist plugging with dirty samples. UHPLC guard columns further extend the life of your analytical column.

Superior peak shape: High-purity silica and advanced bonding chemistries reduce peak tailing, especially at pH 6-7, and give you faster, more accurate results. For high pH methods, Poroshell HPH columns offer exceptional peak shape up to pH 11.

Easy traceability with InfinityLab Column ID tags: All InfinityLab Poroshell 120 columns are available with a permanently fitted ID tag that is preprogrammed with details of phase and dimensions. The column ID tag works seamlessly with InfinityLab Series LC instruments. The preprogrammed ID tag allows you to track various column properties and usage parameters including, but not limited to: column identity, lot and batch number, the last injection date, number of injections, and the maximum temperature used. These details allow chromatographers to get the most from their column and LC instrument.

Column Specifications

| Solid Core | Porous Layer | Particle | Best for |
|-------------------|--------------------|-------------------|--------------------------------------|
| 1.2 μm | 0.35 μm | 1.9 μm | Highest UHPLC performance |
| 1.7 μm | 0.5 μm | 2.7 μm | UHPLC performance at lower pressures |
| 2.5 μm | 0.75 μm | 4 μm | Improved HPLC performance |



InfinityLab Poroshell 120 Columns

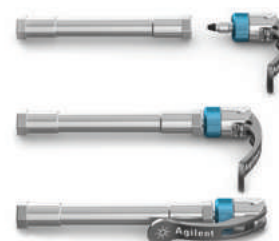
| Size (mm) | Particle Size (µm) | Pressure Limit (bar) | EC-C18 | EC-C8 | Phenyl-Hexyl | SB-C18 | SB-C8 | HPH-C18 | HPH-C8 | Bonus-RP | PFP | SB-Aq | EC-CN | HILIC |
|-----------|--------------------|----------------------|-------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 3 x 150 | 1.9 | 13 00 | 693675-302 | 693675-306 | 693675-312 | | | 693675-502 | | | 693675-308 | | | 693675-301 |
| 3 x 100 | 1.9 | 1300 | 695675-302 | 695675-306 | 695675-312 | | | 695675-502 | | | 695675-308 | | | 695675-301 |
| 3 x 50 | 1.9 | 1300 | 699675-302 | 699675-306 | 699675-312 | | | 699675-502 | | | 699675-308 | | | 699675-301 |
| 2.1 x 150 | 1.9 | 1300 | 693675-902 | 693675-906 | 693675-912 | | | 693675-702 | | | 693675-408 | | | 693675-901 |
| 2.1 x 100 | 1.9 | 1300 | 695675-902 | 695675-906 | 695675-912 | | | 695675-702 | | | 695675-408 | | | 695675-901 |
| 2.1 x 50 | 1.9 | 1300 | 699675-902 | 699675-906 | 699675-912 | | | 699675-702 | | | 699675-408 | | | 699675-901 |
| 4.6 x 250 | 2.7 | 600 | 690975-902T | | | | | | | | | | | |
| 4.6 x 150 | 2.7 | 600 | 693975-902T | 693975-906T | 693975-912T | 683975-902T | 683975-906T | 693975-702T | 693975-706T | 693968-901T | 693975-408T | 683975-914T | 693975-905T | 693975-901T |
| 4.6 x 100 | 2.7 | 600 | 695975-902T | 695975-906T | 695975-912T | 685975-902T | 685975-906T | 695975-702T | 695975-706T | 695968-901T | 695975-408T | 685975-914T | 695975-905T | 695975-901T |
| 4.6 x 75 | 2.7 | 600 | 697975-902T | 697975-906T | | 687975-902T | | | | | | | | |
| 4.6 x 50 | 2.7 | 600 | 699975-902T | 699975-906T | 699975-912T | 689975-902T | 689975-906T | 699975-702T | 699975-706T | 699968-901T | 699975-408T | 689975-914T | 699975-905T | 699975-901T |
| 4.6 x 30 | 2.7 | 600 | 691975-902T | 691975-906T | | 681975-902T | | | | | | | | |
| 3 x 150 | 2.7 | 600 | 693975-302T | 693975-306T | 693975-312T | 683975-302T | 683975-306T | 693975-502T | 693975-506T | 693968-301T | 693975-308T | 683975-314T | 693975-305T | 693975-301T |
| 3 x 100 | 2.7 | 600 | 695975-302T | 695975-306T | 695975-312T | 685975-302T | 685975-306T | 695975-502T | 695975-506T | 695968-301T | 695975-308T | 685975-314T | 695975-305T | 695975-301T |
| 3 x 75 | 2.7 | 600 | 697975-302T | 697975-306T | | 687975-302T | | | | | | | | |
| 3 x 50 | 2.7 | 600 | 699975-302T | 699975-306T | 699975-312T | 689975-302T | 689975-306T | 699975-502T | 699975-506T | 699968-301T | 699975-308T | 689975-314T | 699975-305T | 699975-301T |
| 3 x 30 | 2.7 | 600 | 691975-302T | 691975-306T | | 681975-302T | | | | | | | | |
| 3.0 x 100 | 2.7 | 1000 | 695575-302 | | | | | | | | | | | |
| 3.0 x 150 | 2.7 | 1000 | 693575-302 | | | | | | | | | | | |

(Continued)

TIPS & TOOLS

For the most accurate and reproducible results, use InfinityLab Quick Connect and Quick Turn fittings with your InfinityLab Poroshell 120 column to ensure an exact connection time after time.

Turn to **Pages 103–106** for more information.



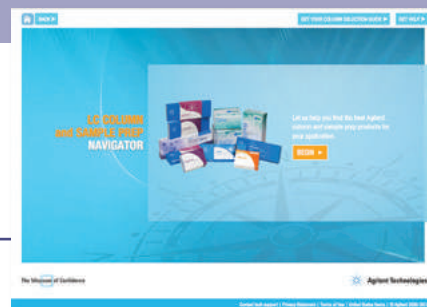
InfinityLab Poroshell 120 Columns

| Size (mm) | Particle Size (µm) | Pressure Limit (bar) | EC-C18 | EC-C8 | Phenyl-Hexyl | SB-C18 | SB-C8 | HPH-C18 | HPH-C8 | Bonus-RP | PFP | SB-Aq | EC-CN | HILIC |
|-----------|--------------------|----------------------|-------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 2.1 x 150 | 2.7 | 600 | 693775-902T | 693775-906T | 693775-912T | 683775-902T | 683775-906T | 693775-702T | 693775-706T | 693768-901T | 693775-408T | 683775-914T | 693775-905T | 693775-901T |
| 2.1 x 100 | 2.7 | 600 | 695775-902T | 695775-906T | 695775-912T | 685775-902T | 685775-906T | 695775-702T | 695775-706T | 695768-901T | 695775-408T | 685775-914T | 695775-905T | 695775-901T |
| 2.1 x 75 | 2.7 | 600 | 697775-902T | 697775-906T | | 687775-902T | | | | | | | | |
| 2.1 x 50 | 2.7 | 600 | 699775-902T | 699775-906T | 699775-912T | 689775-902T | 689775-906T | 699775-702T | 699775-706T | 699768-901T | 699775-408T | 689775-914T | 699775-905T | 699775-901T |
| 2.1 x 30 | 2.7 | 600 | 691775-902T | 691775-906T | | 681775-902T | | | | | | | | |
| 2.1 x 100 | 2.7 | 1000 | 695575-902 | | | | | | | | | | | |
| 2.1 x 150 | 2.7 | 1000 | 693575-902 | | | | | | | | | | | |
| 4.6 x 250 | 4 | 600 | 690970-902T | 690970-906T | 690970-912T | | | 690970-702T | 690970-706T | | 690970-408T | | | 690970-901T |
| 4.6 x 150 | 4 | 600 | 693970-902T | 693970-906T | 693970-912T | | | 693970-702T | 693970-706T | | 693970-408T | | | 693970-901T |
| 4.6 x 100 | 4 | 600 | 695970-902T | 695970-906T | 695970-912T | | | 695970-702T | 695970-706T | | 695970-408T | | | 695970-901T |
| 4.6 x 50 | 4 | 600 | 699970-902T | 699970-906T | 699970-912T | | | 699970-702T | 699970-706T | | 699970-408T | | | 699970-901T |
| 3 x 250 | 4 | 600 | 690970-302T | 690970-306T | 690970-312T | | | 690970-502T | 690970-506T | | 690970-308T | | | 690970-301T |
| 3 x 150 | 4 | 600 | 693970-302T | 693970-306T | 693970-312T | | | 693970-502T | 693970-506T | | 693970-308T | | | 693970-301T |
| 3 x 100 | 4 | 600 | 695970-302T | 695970-306T | 695970-312T | | | 695970-502T | 695970-506T | | 695970-308T | | | 695970-301T |
| 3 x 50 | 4 | 600 | 699970-302T | 699970-306T | 699970-312T | | | 699970-502T | 699970-506T | | 699970-308T | | | 699970-301T |
| 2.1 x 250 | 4 | 600 | 650750-902T | 650750-906T | 650750-912T | | | 690770-702T | 690770-706T | | 650750-408T | | | 650750-901T |
| 2.1 x 150 | 4 | 600 | 693770-902T | 693770-906T | 693770-912T | | | 693770-702T | 693770-706T | | 693770-408T | | | 693770-901T |
| 2.1 x 100 | 4 | 600 | 695770-902T | 695770-906T | 695770-912T | | | 695770-702T | 695770-706T | | 695770-408T | | | 695770-901T |
| 2.1 x 50 | 4 | 600 | 699770-902T | 699770-906T | 699770-912T | | | 699770-702T | 699770-706T | | 699770-408T | | | 699770-901T |
| 4.6 x 250 | 4 | 600 | 690970-902 | 693970-906 | 690970-912 | | | 690970-702 | 690970-706 | | 690970-408 | | | 690970-901 |
| 4.6 x 150 | 4 | 600 | 693970-902 | 695970-906 | 693970-912 | | | 693970-702 | 693970-706 | | 693970-408 | | | 693970-901 |
| 4.6 x 100 | 4 | 600 | 695970-902 | 699970-906 | 695970-912 | | | 695970-702 | 695970-706 | | 695970-408 | | | 695970-901 |
| 4.6 x 50 | 4 | 600 | 699970-902 | 690970-306 | 699970-912 | | | 699970-702 | 699970-706 | | 699970-408 | | | 699970-901 |
| 3 x 250 | 4 | 600 | 690970-302 | 693970-306 | 690970-312 | | | 690970-502 | 690970-506 | | 690970-308 | | | 690970-301 |
| 3 x 150 | 4 | 600 | 693970-302 | 695970-306 | 693970-312 | | | 693970-502 | 693970-506 | | 693970-308 | | | 693970-301 |
| 3 x 100 | 4 | 600 | 695970-302 | 699970-306 | 695970-312 | | | 695970-502 | 695970-506 | | 695970-308 | | | 695970-301 |

(Continued)

LC Column and Sample Prep Navigator

Find a more efficient replacement for your current column—or get recommendations for a new column, based on method parameters. www.agilent.com/chem/navigator



InfinityLab Poroshell 120 Columns

| Size (mm) | Particle Size (µm) | Pressure Limit (bar) | EC-C18 | EC-C8 | Phenyl-Hexyl | SB-C18 | SB-C8 | HPH-C18 | HPH-C8 | Bonus-RP | PFP | SB-Aq | EC-CN | HILIC |
|-----------|--------------------|----------------------|------------|------------|--------------|--------|-------|------------|------------|----------|------------|-------|-------|------------|
| 3 x 50 | 4 | 600 | 699970-302 | 650750-906 | 699970-312 | | | 699970-502 | 699970-506 | | 699970-308 | | | 699970-301 |
| 2.1 x 250 | 4 | 600 | 650750-902 | 693770-906 | 650750-912 | | | 690770-702 | 690770-706 | | 650750-408 | | | 650750-901 |
| 2.1 x 150 | 4 | 600 | 693770-902 | 695770-906 | 693770-912 | | | 693770-702 | 693770-706 | | 693770-408 | | | 693770-901 |
| 2.1 x 100 | 4 | 600 | 695770-902 | 699770-906 | 695770-912 | | | 695770-702 | 695770-706 | | 695770-408 | | | 695770-901 |
| 2.1 x 50 | 4 | 600 | 699770-902 | | 699770-912 | | | 699770-702 | 699770-706 | | 699770-408 | | | 699770-901 |

InfinityLab Poroshell 120 – UHPLC Guard Columns

| Size (mm) | Particle Size (µm) | Pressure Limit (bar) | EC-C18 | EC-C8 | Phenyl-Hexyl | SB-C18 | SB-C8 | HPH-C18 | HPH-C8 | Bonus-RP | PFP | SB-Aq | EC-CN | HILIC |
|-----------|--------------------|----------------------|------------|------------|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 3 x 5 | 1.9 | 1300 | 823750-940 | 823750-941 | 823750-943 | | | 823750-945 | | | 823750-942 | | | 823750-944 |
| 2.1 x 5 | 1.9 | 1300 | 821725-940 | 821725-941 | 821725-943 | | | 821725-945 | | | 821725-942 | | | 821725-944 |
| 4.6 x 5 | 2.7 | 600 | 820750-911 | 823750-913 | 820750-914 | 820750-912 | 820750-923 | 820750-921 | 820750-922 | 820750-925 | 820750-915 | 820750-924 | 820750-927 | 820750-926 |
| 3 x 5 | 2.7 | 600 | 823750-911 | 821725-913 | 823750-914 | 823750-912 | 823750-923 | 823750-921 | 823750-922 | 823750-925 | 823750-915 | 823750-924 | 823750-927 | 823750-926 |
| 2.1 x 5 | 2.7 | 600 | 821725-911 | 690970-906 | 821725-914 | 821725-912 | 821725-923 | 821725-921 | 821725-922 | 821725-925 | 821725-915 | 821725-924 | 821725-927 | 821725-926 |
| 4.6 x 5 | 4 | 600 | 820750-916 | | | | | 820750-930 | 820750-929 | | | | | |
| 3 x 5 | 4 | 600 | 823750-916 | | | | | 823750-930 | 823750-929 | | | | | |
| 2.1 x 5 | 4 | 600 | 821725-916 | | | | | 821725-930 | 821725-929 | | | | | |

Real stories from the lab.



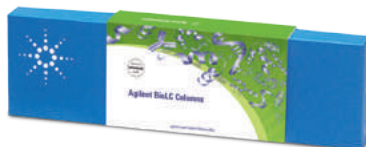
TRUE STORY NO. 46

FASTER, SIMPLER WORKFLOWS

During familiarization training for a new instrument, a CrossLab specialist helped a lab achieve extra productivity benefits through column consolidation.

Agilent
CrossLab
From Insight to Outcome

www.agilent.com/chem/story46



BioLC Columns

Part of the InfinityLab Family

The flexibility to achieve full biomolecule characterization requires a tool box of columns appropriate for large molecule separations. Whether you are analyzing intact proteins, protein fragments, peptide digests, amino acids, or oligonucleotides, Agilent offers a comprehensive range of columns in different pore sizes and particle morphologies designed for these complex separations. All are supported by expert technical support and application chemists around the globe. Agilent BioLC columns enhance the accuracy and speed of your biomolecule characterization by delivering:

- Increased speed to help you meet critical deadlines
- Ability to assess multiple critical quality attributes for multiple attribute monitoring (MAM)
- Increased resolution for accurate quantitation
- Increased sensitivity for confidence in your results
- Increased reproducibility to eliminate costly rework

Agilent BioLC columns are designed for optimum performance with InfinityLab bio-inert LC supplies.

NEED MORE INFORMATION?

Agilent has developed fully integrated biopharma workflow solutions to help resolve complex analytical challenges.

Increase productivity by analyzing the same number of samples without increasing resources or sacrificing data accuracy.

Search 5991-5235EN at www.agilent.com, or visit www.agilent.com/chem/biologics, to see how Agilent can help you solve these challenges.



BioLC Column Portfolio

This chart shows the common LC biomolecule characterization workflows and the recommended Agilent BioLC columns for each.

| Protein identification and impurity profiling | Charged variant analysis | Aggregation analysis | Glycan analysis | Amino acid | Titer determination and purification | Oligonucleotides | Desalting Cartridges |
|---|---|----------------------|---------------------------|--------------------------------|--------------------------------------|-----------------------------|-------------------------|
| Reversed-Phase | Ion Exchange | Size Exclusion | HILIC | Reversed-Phase | Affinity | Reversed-Phase | Reversed-Phase |
| PLRP-S | Bio MAb | AdvanceBio SEC | AdvanceBio Glycan Mapping | AdvanceBio Amino Acid Analysis | Bio-Monolith Protein A | AdvanceBio Oligonucleotides | AdvanceBio Desalting-RP |
| AdvanceBio RP-mAb | Bio IEX (SAX, SCX, WAX, WCX) | Bio SEC-3 | ZORBAX RRHD 300-HILIC | | Bio-Monolith Protein G | | |
| AdvanceBio Peptide Mapping | PL-SAX | Bio SEC-5 | | | | | |
| AdvanceBio Peptide Plus | PL-SCX | ProSEC 300S | | | | | |
| ZORBAX RRHD 300Å 1.8 µm | Bio-Monolith (QA, DEAE, SO ₃) | | | | | | |
| Poroshell 300 | | | | | | | |
| ZORBAX 300SB | | | | | | | |



For a complete list of Agilent BioLC columns, or to order, please visit www.agilent.com/chem/advancebio

LC SYSTEMS

Advance with ease, at ease

Agilent InfinityLab LC Series systems are developed with up and downwards compatibility. So when you invest in an InfinityLab LC Series instrument, you can be assured of seamless integration into any laboratory using Agilent LC instruments. You can upgrade your current Agilent LC module-by-module over time, for stepwise increases in efficiency. What's more, Agilent InfinityLab supplies support this compatibility so you can adapt your system to your needs both now and in the future, protecting your investment.



Agilent 1290 Infinity II LC system

1290 Infinity II LC Series Modules

| Module | Description |
|--------|--|
| G7102A | 1290 Infinity II evaporative light scattering detector |
| G7104A | 1290 Infinity II flexible pump |
| G7114B | 1290 Infinity II variable wavelength detector |
| G7116B | 1290 Infinity II multicolumn thermostat |
| G7117A | 1290 Infinity II diode array detector FS |
| G7117B | 1290 Infinity II diode array detector |
| G7120A | 1290 Infinity II high speed pump |
| G7129B | 1290 Infinity II vialsampler |
| G7159B | 1290 Infinity II preparative open-bed fraction collector |
| G7162B | 1290 Infinity II refractive index detector |
| G7167B | 1290 Infinity II multisampler |
| G7161B | 1290 Infinity II preparative pump |
| G7163A | 1290 Infinity II preparative column compartment |
| G7170B | 1290 Infinity II MS flow modulator |

1260 Infinity II LC Series Modules

| Module | Description |
|--------|---|
| G7110B | 1260 Infinity II isocratic pump |
| G7111A | 1260 Infinity II quaternary pump VL |
| G7111B | 1260 Infinity II quaternary pump |
| G7112B | 1260 Infinity II binary pump |
| G7104C | 1260 Infinity II flexible pump |
| G7129A | 1260 Infinity II vialsampler |
| G7114A | 1260 Infinity II variable wavelength detector |
| G7115A | 1260 Infinity II diode array detector WR |
| G7116A | 1260 Infinity II multicolumn thermostat |
| G7117C | 1260 Infinity II diode array detector HS |
| G7121A | 1260 Infinity II fluorescence detector |
| G7121B | 1260 Infinity II fluorescence detector spectra |
| G7826A | 1260 Infinity II high temperature evaporative light scattering detector |
| G7122A | 1260 Infinity II degasser |
| G7129C | 1260 Infinity II vialsampler |
| G7162A | 1260 Infinity II refractive index detector |
| G7165A | 1260 Infinity II multiple wavelength detector |
| G7167A | 1260 Infinity II multisampler |
| G5654A | 1260 Infinity II bio-inert quaternary pump |
| G5668A | 1260 Infinity II bio-inert multisampler |
| G1328C | 1260 Infinity II manual injector |
| G1364F | 1260 Infinity II analytical fraction collector |
| G7166A | 1260 Infinity II preparative valve-based fraction collector |
| G7161A | 1260 Infinity II preparative binary pump |
| G7157A | 1260 Infinity II preparative autosampler |
| G1364E | 1260 Infinity II preparative fraction collector |
| G9328A | 1260 Infinity II preparative column organizer |
| G4782A | 1260 Infinity II SFC binary pump |
| G4301A | 1260 Infinity II SFC control module |
| G4767A | 1260 Infinity II SFC multisampler |



Agilent 1260 Infinity II LC system



Agilent 1290 Infinity LC system

Legacy LC Systems

Maintaining instrument performance and keeping operations running consistently are the foundations of maximizing lab productivity and efficiency. Which is why although these legacy instruments are no longer available to order Agilent is committed to supporting them. Thus ensuring that you can achieve maximum possible performance from your legacy instruments.

1290 Infinity LC Series Modules

| Module | Description |
|--------|---|
| G1314E | 1290 Infinity variable wavelength detector |
| G1316C | 1290 Infinity thermostatted column compartment |
| G4204A | 1290 Infinity quaternary pump |
| G4212A | 1290 Infinity diode array detector |
| G4220A | 1290 Infinity binary pump |
| G4220B | 1290 Infinity binary pump VL |
| G4226A | 1290 Infinity autosampler |
| G4227A | 1290 Infinity flexible cube |
| G4261B | 1290 Infinity evaporative light scattering detector |
| G4277A | 1290 Infinity LC injector HTS |
| G4278A | 1290 Infinity LC injector HTC |

1260 Infinity LC Series Modules

| Module | Description |
|--------|---|
| G1310B | 1260 Infinity isocratic pump |
| G1311B | 1260 Infinity quaternary pump |
| G1311C | 1260 Infinity quaternary pump VL (400 bar) |
| G1312B | 1260 Infinity binary pump |
| G1312C | 1260 Infinity binary pump VL (400 bar) |
| G1314B | 1260 Infinity variable wavelength detector VL |
| G1314C | 1260 Infinity variable wavelength detector VL+ |
| G1314F | 1260 Infinity variable wavelength detector |
| G1315C | 1260 Infinity diode array detector VL+ |
| G1315D | 1260 Infinity diode array detector VL |
| G1316A | 1260 Infinity thermostatted column compartment |
| G1321A | 1260 Infinity fluorescence detector |
| G1322A | 1260 Infinity standard degasser |
| G1328B | 1260 Infinity manual injector |
| G1329B | 1260 Infinity standard autosampler |
| G1361A | 1260 Infinity preparative pump |
| G1362A | 1260 Infinity refractive index detector |
| G1364B | 1260 Infinity preparative-scale fraction collector |
| G1364C | 1260 Infinity analytical-scale fraction collector |
| G1364D | 1260 Infinity micro-scale fraction collector |
| G1365C | 1260 Infinity multiple wavelength detector |
| G1365D | 1260 Infinity multiple wavelength detector VL |
| G1367E | 1260 Infinity high performance autosampler |
| G1376A | 1260 Infinity capillary pump |
| G1377A | 1260 Infinity high performance micro autosampler |
| G1379B | 1260 Infinity micro degasser |
| G2226A | 1260 Infinity nanoflow pump |
| G2258A | 1260 Infinity dual loop autosampler |
| G2260A | 1260 Infinity preparative autosampler |
| G4240A | 1260 Infinity HPLC-chip cube interface |
| G4212B | 1260 Infinity diode array detector |
| G4218A | 1260 Infinity evaporative light scattering detector |
| G4225A | 1260 Infinity high performance degasser |
| G4240A | 1260 Infinity chip cube MS interface |
| G4260B | 1260 Infinity evaporative light scattering detector |
| G5611A | 1260 Infinity bio-inert quaternary pump |
| G5664A | 1260 Infinity bio-inert analytical-scale fraction collector |
| G5667A | 1260 Infinity bio-inert high-performance autosampler |
| G4302A | 1260 Infinity SFC binary pump |
| G4301A | 1260 Infinity SFC control module |
| G4303A | 1260 Infinity SFC autosampler |



Agilent 1260 Infinity LC system



Agilent 1200 Series Quaternary HPLC System

| 1200 Series LC Modules | |
|------------------------|--|
| Module | Description |
| G1310A | 1200 Series isocratic pump |
| G1311A | 1200 Series quaternary pump |
| G1312A | 1200 Series binary pump |
| G1312B | 1200 Series binary pump SL (600 bar) |
| G1314B | 1200 Series variable wavelength detector |
| G1314C | 1200 Series variable wavelength detector SL |
| G1314D | 1200 Series variable wavelength detector |
| G1314E | 1200 Series variable wavelength detector SL+ |
| G1315C | 1200 Series diode array detector SL |
| G1315D | 1200 Series diode array detector |
| G1316A | 1200 Series thermostatted column compartment |
| G1316B | 1200 Series thermostatted column compartment SL |
| G1321A | 1200 Series fluorescence detector |
| G1322A | 1200 Series vacuum degasser |
| G1328A | 1200 Series manual injector |
| G1329B | 1200 Series standard autosampler (thermostatted) |
| G1361A | 1200 Series preparative pump |
| G1362A | 1200 Series refractive index detector |
| G1364C | 1200 Series preparative fraction collector |
| G1364B | 1200 Series preparative scale fraction collector |
| G1364C | 1200 Series analytical scale fraction collector |
| G1364D | 1200 Series micro collector/spotter |
| G1365C | 1200 Series multiple wavelength detector SL |
| G1365D | 1200 Series multiple wavelength detector |
| G1367B | 1200 Series high performance autosampler (400 bar) |
| G1367C | 1200 Series high performance autosampler SL (600 bar) |
| G1367D | 1200 Series high performance autosampler SL+ (600 bar) |
| G1376A | 1200 Series capillary pump |
| G1377A | 1200 Series microwell plate sampler |
| G1379B | 1200 Series micro degasser |
| G1389A | 1200 Series micro autosampler |
| G2226A | 1200 Series nano pump |
| G2258A | 1200 Series dual loop autosampler preparative scale |
| G2260A | 1200 Series preparative autosampler |
| G4204A | 1200 Series HPLC-Chip cube interface |

1100 Series LC Modules

| Module | Description |
|----------|---|
| G1310A | 1100 Series isocratic pump |
| G1311A | 1100 Series quaternary pump |
| G1312A | 1100 Series binary pump |
| G1313A | 1100 Series standard autosampler |
| G1314A | 1100 Series variable wavelength detector |
| G1315A/B | 1100 Series diode array detector |
| G1316A | 1100 Series thermostatted column compartment |
| G1321A | 1100 Series fluorescence detector |
| G1322A | 1100 Series vacuum degasser |
| G1328A | 1100 Series manual injector |
| G1329A | 1100 Series standard autosampler (thermostatted) |
| G1361A | 1100 Series preparative pump |
| G1362A | 1100 Series refractive index detector |
| G1364A | 1100 Series analytical fraction collector |
| G1364B | 1100 Series preparative fraction collector |
| G1365A/B | 1100 Series multiple wavelength detector |
| G1367A | 1100 Series well plate sampler |
| G1376A | 1100 Series capillary pump |
| G1377A | 1100 Series microwell plate sampler |
| G1379A | 1100 Series micro degasser |
| G1389A | 1100 Series micro autosampler |
| G2226A | 1100 Series nano pump |
| G2258A | 1100 Series dual loop autosampler preparative scale |
| G2260A | 1100 Series preparative autosampler |



Agilent 1100 Series HPLC System

PUT MORE THAN 40 YEARS OF RELENTLESS INNOVATION BEHIND YOUR EVERY RESULT

By continually raising the standards for technologies that support your routine analyses, Agilent's R&D efforts have led to breakthroughs such as:

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- **LC column choices** that deliver the sensitivity and reliability you need for demanding applications
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- **Fresh atomic and molecular spectroscopy ideas** for identifying and confirming targets and unknowns

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The ways labs capture, analyze and share data profoundly affect their efficiency. Agilent offers a rich, integrated suite of software products built on customer-driven architectural values with the Agilent OpenLAB software suite. OpenLAB delivers superior performance and connection across multiple systems, providing open systems integration and investment protection. Our commitment is to deliver more value across each step in the life cycle of scientific data—from data collection and analysis to interpretation and management.



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LIFE SCIENCE SOLUTIONS



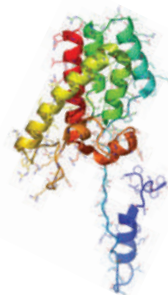
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Biotherapeutics have enormous potential to improve human health, with growing numbers of protein and antibody therapeutics to address unmet medical needs. At every development stage, from disease research to QA/QC and manufacturing, Agilent can help you make the right choices for moving therapeutics to market. We understand the biopharmaceutical workflow so our product families work together seamlessly, as engines of research, discovery, and development. Agilent columns deliver complete characterization of biomolecules using reversed-phase, size exclusion, ion exchange, and affinity chromatography. Our bio-inert supplies ensure that every part of your workflow delivers the performance you need to optimize your bioseparation.



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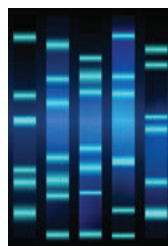


Proteomics

Research into how large sets of proteins affect the health of an organism requires special sets of analytical tools. Agilent has built a formidable arsenal of liquid chromatograph/mass spectrometers, bioinformatics systems, multiple affinity protein removal columns, and OFFGEL electrophoresis for protein identification and protein biomarker discovery. Accurate-Mass mass spectrometry and the microfluidic HPLC-Chip/MS are two Agilent innovations speeding the work of proteomics researchers around the globe.

Metabolomics

Collections of small molecules are increasingly being seen as rich sources of biomarkers, but studying metabolites presents many challenges. The need for speed, accuracy, and powerful interpretation capabilities in looking at chemical profile snapshots is underscored because molecules are constantly entering, leaving or changing within the metabolome. Agilent's GC, LC, and MS portfolios, along with our excellent bioinformatics offerings, user-customizable METLIN metabolite database for LC/MS, and the industry's first commercial GC/MS retention time locked metabolite library align well with the needs of metabolomics researchers.



Genomics

Agilent is a global leader in microarrays, scanners, and NGS reagents used in a wide variety of genomic-based disease research experiments. Our SureSelect and HaloPlex Target Enrichment Systems dominate the category, streamlining next-generation sequencing studies. Agilent offers a wide range of catalog CGH and gene expression microarrays and a highly developed capability to produce custom arrays using our free online design tool, SureDesign. All Agilent microarrays feature highly sensitive, selective 60-mer probes, and, with as many as eight arrays printed on a slide, the cost-per-sample is cost-efficient.



Life Science Informatics

Mirroring its extensive instrument portfolio, Agilent offers the industry's most extensive suite of bioinformatics software, helping users derive knowledge from complex genomic, proteomic, metabolomic and other biological data. SureCall and CytoGenomics software analyzes NGS and aCGH data and the GeneSpring suite provides multi-omic analysis and visualization capabilities to help compare complex datasets to explore biological questions from multiple perspectives. The GeneSpring suite includes the GX module for microarray-based gene expression and genotyping data, the PA module for Pathway Analysis and multi-omic analysis and the MPP software, which analyzes mass spec data from proteomics and metabolomics experiments.



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To meet the skyrocketing demand for more throughput and automation, Agilent has substantially expanded its lab automation offerings. The Agilent line of liquid handlers and microplate processors are designed to streamline high-volume life science workflows. Agilent is also continually upgrading its advanced autosamplers for LC, GC, LC/MS, and GC/MS, adding functionality and speed to reflect the performance of its advanced instruments.



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Agilent works with customers to solve vacuum challenges from experiments in high-energy physics to developing systems for nanotechnology. Agilent manufactures vacuum systems used in its own mass spectrometry instruments as well as those of other manufacturers. Agilent's vacuum technology has been proven by the most powerful physics experiment ever built, CERN's Big Bang machine, which was used in the discovery of the Higgs boson.

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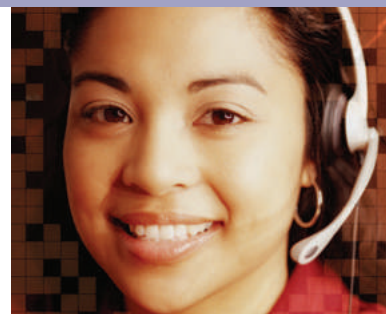
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