

LC AND LC/MS

Your Essential Resource for Columns & Supplies



Pump Supplies

Regular pump maintenance helps lower operating costs and generate precise results that make you feel confident.

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.



Sapphire piston and seals

Pump Routine 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 system 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.

X

Pump Routine 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 $\rm H_2O$ 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

LC AND LC/MS

47

AGILENT PARTS AND SUPPLIES



Purge valve assembly, G1311-60009



Purge valve with PTFE frit, G4280-60061



PTFE frits, 01018-22707

Purge Valves

90		
Description	Comments	Part No.
Purge valve with PTFE frit, 400 bar	For G1310A, G1311A, G1312A, G1376A, G2226A	G1311-60009
Purge valve with PTFE frit	For 1120	G4280-60031
Purge valve with PTFE frit	For G1311C, G1312C, 1220	G4280-60061
Purge valve with PTFE frit	For G1310B, G1311B, G1312B, G4302A,	G1312-60061
PTFE frit	For G1310A, G1311A, G1312A, G1376A, G2226A, 1120, 1220, 1220, G1310B, G1311B, G1312B, G1311C, G1312C, G4202A	01018-22707
Seal cap	Not suitable for outlet ball valves with integrated seal	5067-4728
Seal for purge valve	For 1120	0905-1192
Purge valve actuator	For 1120	G4280-60033
Bio-inert purge valve	For G5611A	G5611-60061
5 position / 7 port rotor seal	For G4220A, G4220B	5068-0005
5 position / 7 port stator	For G4220A, G4220B	5068-0004
Multi purpose valve head	For G4204A	5067-4174
Stator for 5067-4174 multi purpose valve head	For G4204A	5068-0122
Rotor for 5067-4174 multi purpose valve head	G4204A	5068-0123
Stainless steel filter assembly with PEEK ring, 2 µm pore size	For G1361A	5022-2192
Open end wrench, 14 mm	To remove purge valve	8710-1924

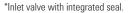


TIPS & TOOLS

Inlet and Outlet Valves

Inlet Valves

Description	Comments	Part No.
Active inlet valve without cartridge	For G1310A, G1311A, G1312A, G1376A, G2226A, G1312B, G1312C	G1312-60025
Cartridge for active inlet valve 400 bar	For G1310A, G1311A, G1312A, G1376A, G2226A, G1312C	5062-8562
Cartridge for active inlet valve 600 bar	For G1312B	G1312-60020
Bio-inert active inlet valve	For G5611A	G5611-60025
Bio-inert cartridge for active inlet valve, 600 bar	For G5611A	G5611-60020
Inlet valve for 1290 quaternary pump	For G4204A	G4204-60022*
Valve assemblies (inlet/outlet) for prep pumps	For G1361A	G1361-60012
Passive inlet valve	For G1310B, G1311B, G1311C, 1120, 1220, G4302A	G1312-60066*
Passive inlet valve	For G4220A, G4220B	G4220-60022*
Seal cap	Not suitable for outlet ball valves with integrated seal	5067-4728



Active inlet valve without cartridge, G1312-60025



Cartridge, 400 bar, 5062-8562



Passive inlet valve, G1312-60066

Outlet Valves

Description	Comments	Part No.
Outlet ball valve	For G1310A, G1311A, G1312A,G1376A, G2226A, 1120, 1220, G1310B, G1311B, G1311C, G1312B, G1312C, G4302A	G1312-60067*
Outlet ball valve	For G4220A, G4220B, G4204A	G4220-60028*
Bio-inert outlet ball valve	For G5611A	G5611-60067*
Valve assemblies (inlet/outlet) for prep pumps	For G1361A	G1361-60012
Seal cap	Not suitable for outlet ball valves with integrated seal	5067-4728

^{*}Outlet ball valve with integrated seal.





Seal cap, 5067-4728



Outlet ball valve, G1312-60067



Outlet ball valve, G4220-60028

TIPS & TOOLS





Sapphire piston and seals

Pistons and Seals

Agilent pistons are made from a high purity, monocrystalline sapphire for maximum durability. Although ceramic pistons can be manufactured at a lower cost, ceramic is a sintered, polycrystalline material, which can cause undesirable variations during the production process. 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 plunger	For G5611A, 4302A	5067-4695
Zirconium based ceramic plunger	For G4220A, G4220B, G4204A	5067-4678
Sapphire plunger	For G1310A, G1311A, G1312A, G1376A, G2226A, 1120, 1220, G1310B, G1311B, G1312B, G1311C, G1312C	5063-6586
Sapphire plunger	For G1361A	G1361-22402

Seals

Description	Comments	Part No.
Bio-inert piston seal	For G5611A	G5611-21503
Piston seal polyethylene	For G4220A, G4220B, G4204A	0905-1719
Piston seal graphite filled PTFE (reversed-phase) (2/pk)	For G1310A, G1311A, G1312A, G1376A, G2226A, 1120, 1220, G1310B, G1311B, G1312B, G1311C, G1312C, G4302A	5063-6589
Piston seal Polyethylene (normal phase)	For G1310A, G1311A, G1312A, G1376A, G2226A, 1120, 1220, G1310B, G1311B, G1312B, G1311C, G1312C, G4302A	0905-1420
Piston seal	For G1361A	5022-2188



Piston seals, 5063-6589

Specific parts for 1290 Infinity LC pumps

Description	Comments	Part No.
Jet Weaver 35 μL/100 μL	For G4220A, G4220B, G4204A	G4220-60006
Jet Weaver 380 μL	For G4220A, G4220B, G4204A	G4220-60012
Clamp for in-line filter	For G4204A	G4204-40000
Outlet filter 1290 quaternary pump	For G4204A	G4204-60004
Inlet valve for flush pump		5067-4717
Outlet valve for flush pump		5067-4716
Tubing kit 270 mm, 2/pk		5067-4661
Tubing kit 140 mm, 2/pk		G4220-60035
Shut-off valve	For G4220A, G4220B, G4204A	5067-4124
Inline pressure relief valve kit	For G4220A, G4220B	G4212-68001
Solvent selection valve bridge tube		5067-4697
Pressure relief valve	For G4220A, G4220B	G4212-60022
PEEK seal for inlet weaver assembly	For G4204A	G4204-40005
Support ring	For G4220A, G4220B	G4220-60015
Seal keeper	For G4220A, G4220B	G4220-60016

TIPS & TOOLS





Peristaltic pump, 5042-8507



Peristalitic pump with ChemSure tubing, 5065-9952

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) is recommended as the wash solvent.

Seal Wash

Description	Comments	Part No.
Peristaltic pump cassette with silicone tubing	For 1100/1200/1200 RRLC and 1260 Infinity LC pumps	5042-8507
Silicone tubing, 1 mm id, 3 mm od, 5 m		5065-9978
Peristalitic pump with ChemSure tubing	For 1100/1200/1200 RRLC and 1260 Infinity LC pumps	5065-9952
ChemSure tubing for peristaltic pump		5042-8954
Wash Seal and Wash Keepe	er	
Wash seal	For 1100/1200/1200 RRLC, 1120 and 1260/1220 Infinity LC pumps	0905-1175
Seal keeper	For 1100/1200/1200 RRLC and 1120 pumps	5001-3743
Bio-inert seal keeper	For G5611A LC pump	G5611-26210
Wash seal gasket, 6/pk	For 1100/1200/1200 RRLC, 1120 and 1260/1220 Infinity LC pumps	5062-2484
Wash seal PE	For 1290/1260/1220 Infinity LC pump	0905-1718
Support ring	For 1290/1260/1220 Infinity LC pump	G4220-63010
Support ring	For 1290 Infinity pump without seal wash	G4220-63015
Backup ring for seal holder	For 1290/1260/1220 Infinity LC pump	G4220-24013
Seal keeper	For 1290/1260/1220 Infinity LC pump	G4220-26210



TIPS & TOOLS

Solvent Reservoir and Supplies

Solvent Reservoir and Supplies

Description	Part No.
Solvent Reservoir	
Solvent reservoir, 1 L	9301-1420
Solvent reservoir, 1 L, with cap	9301-1421
Solvent reservoir, 1 L, F29/32	9301-0656
Solvent reservoir, amber, 1 L	9301-1450
Solvent bottle, clear, 2 L, 2 inlets	5065-4421
Solvent bottle, amber, 2 L	9301-6341
Solvent bottle, clear, 2 L	9301-6342
Bottle Head Assembly	
Bottle head assembly for screw bottle	G1311-60003
Bottle head assembly for F29/32 tapered solvent bottle	G1312-68716
Bottle head assembly with tubing and filter	G1376-60003
For capillary and nano systems (with stainless steel solvent filter)	
Bottle head assembly for prep system	G1361-60022
Bottle head assembly	G4220-60007
Bottle cap with 3-hole insert	5063-6531



Solvent reservoirs



Prep bottle, 5065-4421



Solvent bottle, amber, 9301-6341



Glass filter, 5041-2168

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

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
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
Solvent inlet filter, stainless steel	For use in capillary and nano systems	01018-60025				



Filter frit adapters, 5062-8517



Solvent inlet filter, 01018-60025

Frits and Adapters

Description	Part No.
Solvent mixer, 1100 Series	G1312-87330
Solvent mixer, short, 200 μL	5067-1565
Frit adapter, PTFE, for 4.7 mm od tubing	G1361-23205
Frit adapter, PTFE, for 3.2 mm od tubing For G2258A Dual Loop Autosampler	G2258-23201
O-ring, Viton, 30 mm	0905-1516
Stainless steel filter assembly with PEEK ring, 2 µm pore size	5022-2192



Safety Caps

Open or partially covered solvent bottles can lead to the evaporation of solvents and harmful solvent vapors. Prevent solvent evaporation and possible chemical spills with solvent safety caps from Agilent. These safety caps have been designed for optimal sealing with an integrated exhaust valve providing pressurization during solvent extraction and allowing proper solvent flow to your HPLC system. The exhaust valve contains a PTFE membrane to prevent contamination of your solvents from dirt and dust particles.

- Designed to fit all solvent bottles
- Constructed of PTFE and PFA for high chemical resistance
- · Caps rotate freely, preventing tube twisting during bottle exchange
- Available in GL40, GL45, S60 and NS29/32 thread sizes



10 L waste can assembly, S60, 5043-0243

Installation Details for Solvent Safety Caps

Installation Guide for Standard Safety Caps - 4 Simple Steps to Install a Safety Cap

- 1. Guide the solvent tube through the fitting on the safety cap
- 2. Re-connect the solvent inlet filter to the solvent tube (open end)
- 3. Screw the safety cap on top of your solvent bottle
- Adjust the length of the solvent tube in the solvent bottle and fix the tube by tightening the fitting

Installation Instructions for Safety Caps with Stopcocks

These caps have a shut-off valve which can be closed. This keeps the solvent tube in the bottle during maintenance activities with no risk of having solvent dropping out of the flow path.

4 Simple Steps to Install a Safety Cap with Stopcocks

- 1. Cut the solvent tube in 2 parts
- 2. Connect the upper part to the fitting (red or blue) on the safety cap (Top)
- 3. Cut a suitable length and connect the lower part to the fitting on the safety cap (Bottom)
- 4. Screw the safety cap on top of your bottle



Safety Cap I, 5043-0223



Safety Cap II, 5043-0224



Safety Cap IV for GL45 bottles, 5043-0226



Safety Cap IV for S60 threaded waste bottles, 5043-0227



 $5\,L$ waste can assembly, GL45, 5043-0242



10 L waste can assembly, S60, 5043-0243

Safety Caps and Accessories

Description	Kit Contents	Part No.
Safety Cap II with 2 ports – NS29/32	Includes 1 safety cap, 2 fittings 3.2 mm PFA, 1 venting valve with 1 µm PTFE membrane	5043-0221
Safety Cap I with 1 port — GL 45	Includes 1 safety cap, 1 fitting 3.2 mm PFA, 1 venting valve with 1 µm PTFE membrane	5043-0223
Safety Cap II with 2 ports – GL 45	Includes 1 safety cap, 2 fittings 3.2 mm PFA, 1 venting valve with 1 µm PTFE membrane	5043-0222
Safety Cap I with 1 port for prep — GL45	Includes 1 safety cap, 1 fitting 4.7 mm PFA, 1 venting valve with 1 µm PTFE membrane	5043-0300
Safety Cap I with 1 stopcock — GL45	Includes 1 safety cap, 1 fitting 2.3 mm PFA, 1 fitting 2.3 mm PTFE, 1 venting valve with 1 µm PTFE membrane	5043-0225
Safety Cap II with 2 stopcocks – GL 45	Includes 1 safety cap, 2 fittings 2.3 mm PFA, 2 fittings 2.3 mm PTFE, 1 venting valve	5043-0224
Safety Cap IV with 4 ports – 1 leak port – GL45	Includes 1 safety cap, 4 fittings 2.3 mm PFA, 4 fittings 1.6 mm PFA, 4 fittings 2.3 mm PFA, 1 leak hose. Must be used with charcoal filter, P/N 5043-0230.	5043-0226
Safety Cap IV with 4 ports – 1 leak port – S60	Includes 1 safety cap, 4 fittings 2.3 mm PFA, 4 fittings 1.6 mm PFA, 1 leak hose. Must be used with charcoal filter, P/N 5043-0230.	5043-0227
5 L waste can GL45 with 4 ports and 1 leak port	Includes 5 L waste can, 1 safety cap (5043-0226), 2 ports collector PTFE. Must be used with charcoal filter, P/N 5043-0230.	5043-0242
10 L waste can S60 with 4 ports and 1 leak port	Includes 10 L waste can, 1 safety cap (5043-0227), 2 ports collector PTFE. Must be used with charcoal filter, P/N 5043-0230.	5043-0243
Safety Waste Set S50	Includes 5 L space saving waste can, 1 safety cap, 4 fittings 2.3 mm PFA, 1 x 6.4 mm tubing connector, Charcoal filter (48 g)	5043-0831
Venting valve with 1 µm PTFE membrane*		5043-0232
Thread Adapter GL45-GL40 (PTFE)		5043-0234
Thread Adapter PTFE, GL45-GL38		5043-0272
Thread adapter GL45-GPI38-23, (PTFE)		5043-0832
Safety funnel + cover S60, PEHD, conductive		5043-0828
Safety funnel + cover S60, PEHD		5043-0829
Tool for fitting		5043-0830

^{*}Valve change is recommended every six months

Replacement Parts for Safety Caps

Description	Unit	Part No.
Fitting for 3.2 mm tube, PFA	6/pk	5043-0255
Fitting for 2.3 mm tube, PFA	5/pk	5043-0228
Fitting for 1.6 mm tube, PFA	5/pk	5043-0229
Charcoal filter, 48 g		5043-0230
Screw plug 1/4 in, PTFE		5043-0231
Venting valve with 1 µm PTFE membrane*		5043-0232
Screw plug 1/8 in, PTFE	5/pk	5043-0233
2 ports collector, PTFE		5043-0235
5 L waste can, GL45		5043-0236
10 L waste can, S60		5043-0237
3 port collector		5043-0238
Adapter for two 3.2 mm tubes		5043-0239

^{*}Valve change is recommended every 6 months



2.3 mm fittings to connect waste tubes from the purge valve, 5043-0228



1.6 mm fitting to connect wash tubes going to the peristaltic pump of the High Performance ALS/Wellplate Sampler, 5043-0229



Charcoal filter, 48 g, 5043-0230



Screw plug, 1/4 in, PTFE, 5043-0231



Replacement PTFE filter (replace every six months), 5043-0232



Screw plug, 1/8 in, PTFE, 5043-0233



2 ports collector (PTFE), 5043-0235



1200 Series Vacuum Degasser

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



Mounting tool, 0100-1710

Vacuum Degasser Care

- To generally clean the vacuum degasser tubing, flush the system with isopropanol
- Flush the degasser with water after using buffers
- Speed solvent changes by drawing solvent through the degasser and tubing with syringe adapter kit



Plastic tubing cutter, 8710-1930

Vacuum Degassers

Description	Comments	Part No.
Tubing kit, degasser to pump, 4/pk, 30 cm pieces of tubing with screws and bushings	For G1322A, G1379A/B	G1322-67300
Inlet tubing	For Agilent 1260 Infinity Quaternary Pump VL	5067-5378
Mounting tool for flangeless nut	For G1322A, G1379A/B	0100-1710
Plastic tubing cutter	For G1322A, G1379A/B	8710-1930
Tefzel ferrules and SS lock rings, 1/8 in, 10/pk	For G1322A, G1379A/B	5063-6598
PPS nuts, 1/8 in, 1/4-28 thread, 10/pk	For G1322A, G1379A/B	5063-6599
Union, 1/4-28 thread, polypropylene	For G1322A, G1379A/B	5022-2155
PTFE solvent tubing, 5 m, 1.5 mm id, 3 mm od	For G1322A, G1379A/B	5062-2483
Disposable syringes, 20 mL, 10/pk	For G1322A	5062-8534
Syringe adapter, 1/16 in od, 2 in long	For G1322A	9301-1337
Micro vacuum degasser tubing kit	For G1379A	G1379-67310
Micro vacuum degasser tubing kit	For G1379B	5042-8922
Online degasser accessory kit Includes 8 screws, 8 bushings, 4 markers, tubing, syringe and syringe adapter	For G1322A, G1379A/B	G1322-68705
Vaccum chamber (2 channel)	For G1379A, G1379B	5067-4798
Tubing kit for 5067-4798 vaccum chamber	For G1379A, G1379B	5067-5380
Vaccum chamber replacement kit Includes two 5067-4798 and one 5067-5380	For G1379A, G1379B	5067-5383



Ferrules and rings, 5063-6598



PPS nuts, 5063-6599

Pump Kits

Pump Kits

Description	Kit Contents	Part No.
Start-up Kits		
Pump start-up kit For 1100/1200/1220 RRLC pumps	Includes 1 outlet cap, 5 PTFE frits, 4 piston seals, 1 outlet gold seal, 2 glass solvent inlet filters, 20 µm, and 1 cartridge for active inlet valve	G1311-68710
Nanoflow LC start-up kit	Includes PEEK coated fused silica capillaries, column and fittings to start up a Nanoflow LC System	G2228-68700
Seal Wash Kits		
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 and silicone tubing	G1311-68711
Active seal wash kit	Includes 4 wash seal gaskets, 4 pump seals, 2 peristaltic pumps (includes pump cassette and motor), 4 seal keepers, 4 support ring assemblies, seal insert tool and silicone tubing	G1312-68711
Continuous seal wash kit For 1100/1200/1200 RRLC pumps	Includes 2 wash seal gaskets, 4 m flex tubing, 2 pump seals, 1 flow regulator, 2 seal keepers, 2 support ring assemblies, 20 mL luer lock syringe, seal insert tool and abrasive paper	01018-68722
Seal wash kit for 1260 Capillary/Nano pump	Includes 3 adaptor luer/barbs, 2 film washers, 1 insert tool, 2 seal pumps, 1 clamp hose, 2 seal wash, 1 syringe, 2 support ring 1290 Infinity LC w/seal wash, 2 seal keepers for 1290 Infinity LC, and 2 backup rings for seal keeper 1290 Infinity	G1376-60005
Seal wash PM kit For 1260 Infinity LC pumps	Includes 2 PTFE wash seals (P/N 0905-1175), 2 gasket wash seals (P/N 01018-07102)	G1310-68742
PM kit for seal wash option	Includes 2 wash seals and 1 pack of 6 wash seal gaskets	G1310-68731
Preventive Maintenance Kits		
For 1260 Infinity LC isocratic or quaternary and 1220 pumps	Includes 1 PTFE pump seal (P/N 0905-1503), PTFE frits, 5/pk (P/N 01018-22707), 1 seal cap (P/N 5067-4728)	G1310-68741
For 1260 Infinity LC binary pump	Includes 1 PTFE pump seals (P/N 0905-1503), PTFE frits, 5/pk (P/N 01018-22707), 1 seal cap (P/N 5067-4728), sieves for outlet valve, 10/pk (P/N 5063-6505)	G1312-68741
For 1100/1200 isocratic or quaternary pumps	Includes piston seal, PTFE frits, and 2 seal caps	G1310-68730
For 1290 Infinity pump	Includes pump seal exchange tool, torque wrench, and hex bit	5067-4699
For Bio-inert quaternary pump	Includes bio-inert piston seal, 5/pk PTFE frits, seal cap assembly, film washer, peristaltic pump, silicone tubing, Bio-inert wash seal	G5611-68741

(Continued)



Pump start-up kit, G1311-68710

Pump Kits

Description	Kit Contents	Part No.
Preventive Maintenance Kits		
For 1100/1200 binary pump	Includes 4 piston seals, PTFE frits, 2 sieves, and 3 seal caps	G1312-68730
For G1376A capillary pump	Includes 4 pump seals, 1 stainless steel frit, and 4 seal cap assemblies	G1376-68710
For 1100/1200 and 1260 Infinity LC prep pump	Includes 1 filter cup (P/N 3150-0942), 4 seal prep flange (P/N 5022-2188), 1 filter assembly (P/N 5022-2192), 1 peristaltic pump	G1361-68710
For 1120 manual injector systems	Includes 1 piston seal, 5 PTFE frits, 1 PEEK rotor seal, and 2 seal cap assemblies	G4280-68710
For 1220 manual injector systems	Includes piston seals, PTFE frits, rotor seal, and 2 seal cap assemblies	G4280-68750
For 1220 automated injector systems	Includes piston seals, PTFE frits, rotor seal, 2 seal cap assemblies, needle and needle seat	G4280-68770
For 1120 automated injector systems	Includes 1 piston seal, 5 PTFE frits, 1 Vespel rotor seal, 1 needle, 1 needle seat, and 2 seal cap assemblies	G4280-68730
Extended PM kit For 1100/1050/1200 pumps	Includes 2 piston seals (P/N 5063-6589), PTFE frits, 5/pk (P/N 01018-22707), cartridge active inlet valve (P/N 5062-8562), outlet ball valve (P/N G1312-60067) and 2 pistons (P/N 5063-6586)	5065-4499
Accessory Kits		
1260 Infinity LC binary pump accessory kit	Includes 1 tubing assembly (P/N 5063-6527), 1 CAN cable (P/N 5181-1519), 1 RRLC system configurator, 1 stainless steel capillary, 400 x 0.17 mm (P/N G1312-87303), 1 stainless steel capillary, 700 x 0.17 mm (P/N G1312-87304)	G1312-68755
1100/1200 pump accessory kit	Includes 3 wrenches, 5 PTFE frits, tubing, capillary and wrist strap	G1311-68705
Pump configuration kit for G1312B with G1158B 2 position/6 port valve	Includes side cover with fixed rail, top and right cover for pump housing, and 6 connecting capillaries. Allows automatic switching between different delay volumes to optimize the system for 2.1 mm id or 4.6 mm id columns	G1312-68726
Capillary pump accessory kit	Includes purge valve and holder, hex keys 2.5 and 3 mm, 2 wrenches 1/2 in x 1/16 in, wrenches 1/4 in x 5/16 in and 14 mm, wrist strap, torque adaptor and stainless steel frit, 0.5 μ m	G1376-68705
Accessory kit prep pump/gradient G1361A	Includes stainless steel connecting capillaries, solvent mixer, 2 L solvent bottle, bottle head assembly, filter, glass stop valve, stainless steel union, tubing and other parts	G1361-68707
Online degasser accessory kit	Includes 8 screws, 8 bushings, 4 markers, tubing, syringe and syringe adapter	G1322-68705
Extended flow range kit, 100 µL/min	Includes all parts to go from 20 µL/min to 100 µL/min flow rate in a capillary LC system	G1376-68707
Manual prep injection valve kit, stainless steel	Includes position sensing, 10 mL loop, 25 mL syringe, ring mounting bracket, start cable and SS connecting capillaries, 0.5 mm id, 40 cm and 60 cm	5065-9922



