

LC AND LC/MS



In this Chapter

Parts and Supplies

- 712** Bio-inert Supplies
- 716** General Supplies
- 739** Pump Supplies
- 752** Autosampler Supplies
- 758** Fraction Collector Supplies
- 762** Valve Supplies
- 772** TCC Supplies
- 775** Detector Supplies
- 787** LC/MS Supplies

LC and LC/MS Columns

- 796** HPLC Column Selection
- 806** Cartridge Column Systems
- 818** Columns for Analytical HPLC
- 891** Columns for Special Applications
- 916** Preparative HPLC Columns and Flash Chromatography
- 945** GPC/SEC Columns and Calibrants
- 996** Biosolutions and Columns for Biologic Characterization

LC and LC/MS Troubleshooting

- 1052** HPLC Troubleshooting
- 1056** LC/MS Troubleshooting

LC and LC/MS Applications

- 1059** BioPharmaceutical Applications
- 1076** Chemical/Industrial Applications
- 1079** Environmental Applications
- 1088** Food and Consumer Product Applications
- 1102** Pharmaceutical Applications



NEW!

Agilent 1260 Infinity Bio-inert Quaternary LC Supplies



For your challenging bio-molecule analyses, the new 1260 Infinity Bio-inert Quaternary LC System sets new standards in performance, reliability, and robustness. Analysis of proteins and biotherapeutics usually presents the most challenging solvent conditions for any LC instrument. In addition, bio-molecules tend to bind unspecifically to surfaces, requiring tedious procedures. To address these needs, Agilent designed this application-specific LC instrument for bio-molecular analysis – without any compromise in performance – built on the proven Agilent 1200 Infinity platform technology.

100% Bio-inert

The Agilent 1260 Infinity Bio-inert Quaternary LC features bio-inertness for all components without exception. The sample flow path through autosampler, capillaries and a variety of detectors are completely metal-free, with only PEEK and ceramic components coming into contact with your bio-molecule. Thus, the uncertainty of secondary interaction for proteins and peptides with surfaces which can result in peak tailing, low recovery and decreased column lifetime is minimized – and your confidence maximized.

1260 Bio-inert Quaternary Pump Parts

Description	Part No.
Bio-inert purge valve	G5611-60061
Bio-inert active inlet valve	G5611-60025
Bio-inert cartridge for active inlet valve, 600 bar	G5611-60020
Bio-inert outlet ball valve	G5611-60067
Sapphire piston	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

1260 Bio-inert High Performance Autosampler Parts

Description	Part No.
Bio-inert 2 position/6 port injection valve	5067-4131
Rotor seal, 3 grooves, max 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
Bio-inert seat assembly, 0.17 mm ID, 100 mm	G5667-87017
Sapphire piston, 100 µL	5067-4695
Bio-inert piston seal	G5611-21503

1260 Bio-inert Valve Parts

Description	Use With	Part No.
Bio-inert rotor seal, PEEK	Bio-inert 2 position/6 port switching valve	0101-1409
Bio-inert stator	Bio-inert 2 position/6 port switching valve	5068-0060
Stator face, ceramic	Bio-inert 2 position/6 port switching valve	0100-1851
Bio-inert rotor seal, PEEK	Bio-inert 8 position/9 port switching valve	5068-0043
Bio-inert stator	Bio-inert 8 position/9 port switching valve	5068-0042
Bio-inert stator face	Bio-inert 8 position/9 port switching valve	5068-0091
Bio-inert rotor seal, PEEK	Bio-inert 4 column selection valve	5068-0045
Bio-inert stator	Bio-inert 4 column selection valve	5068-0044
Bio-inert stator face	Bio-inert 4 column selection valve	5068-0093

1260 Bio-inert 2 Position/6 Port Manual Injection Valve Parts

Description	Part No.
Bio-inert 2 position/6 port manual injection valve Includes needle port; does not include sample loop	5067-4158
Bio-inert rotor seal, PEEK	0101-1409
Stator face, ceramic	0100-1851
Bio-inert stator	5068-0060
PEEK sample loop, 5 µL	0101-1241
PEEK sample loop, 10 µL	0101-1240
PEEK sample loop, 20 µL	0101-1239
PEEK sample loop, 50 µL	0101-1238
PEEK sample loop, 100 µL	0101-1242
PEEK sample loop, 200 µL	0101-1237
PEEK sample loop, 500 µL	0101-1236
PEEK sample loop, 1 mL	0101-1235
PEEK sample loop, 2 mL	0101-1234
PEEK sample loop, 5 mL	0101-1230
PEEK sample loop, 10 mL	0101-1227
PEEK sample loop, 20 mL	0101-1226

1260 Bio-inert Detector Parts

Description	Use With	Part No.
Bio-inert standard flow cell, with RFID tag, 10 mm, 13 µL, 120 bar	G1315C/D and G1365C/D	G5615-60022
Bio-inert max light cartridge cell, 60 mm, 4.0 µL, 60 bar	G4212A/B	G5615-60017
Bio-inert max light cartridge cell, 10 mm, 1.0 µL, 60 bar	G4212A/B	G5615-60018
Bio-inert FLD flow cell	G1321B	G5615-60005
PEEK tubing, 0.18 mm ID, 1.5 m		0890-1763

1260 Bio-inert Fittings

Description	Part No.
Bio-inert union, 600 bar, 10-32 with PEEK insert	5067-4741

1260 Bio-inert Titan Capillaries

From	To	ID (mm)	Length (mm)	Material	Fittings/Connection	Part No.
Pump	Autosampler	0.17	400	Titan	Pre-swaged	G5611-60500
		0.17	700	Titan	Pre-swaged	G5611-60501
Pump	Manual injection valve	0.17	900	Titan	Pre-swaged	G5611-60502
Injection valve	Metering device	0.17	160	Titan	Pre-swaged	G5611-60503
Damper	Pump head Piston 1	0.6	234	Titan	Pre-swaged	G5611-67301
Outlet ball valve	Damper	0.6	248	Titan	Pre-swaged	G5611-67300

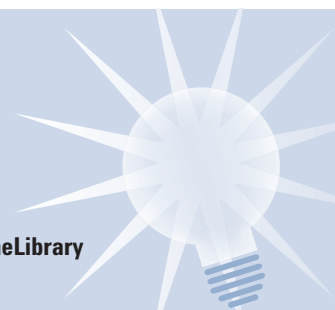
1260 Bio-inert PEEK/Stainless Steel Capillaries

ID (mm)	Length (mm)	Material	Fittings/Connection	Part No.
0.17	100	PEEK/stainless steel	Without fitting	5067-4777
0.17	150	PEEK/stainless steel	Without fitting	5067-4778
0.17	200	PEEK/stainless steel	Without fitting	5067-4779
0.17	300	PEEK/stainless steel	Without fitting	5067-4780
0.17	400	PEEK/stainless steel	Without fitting	5067-4781
0.17	500	PEEK/stainless steel	Without fitting	5067-4782
0.17	100	PEEK/stainless steel	Male to male, pre-swaged	G5667-60502
0.17	150	PEEK/stainless steel	Male to male, pre-swaged	G5667-60503
0.17	200	PEEK/stainless steel	Male to male, pre-swaged	G5667-60504
0.17	300	PEEK/stainless steel	Male to male, pre-swaged	G5667-60505
0.17	400	PEEK/stainless steel	Male to male, pre-swaged	G5667-60500
0.17	500	PEEK/stainless steel	Male to male, pre-swaged	G5667-60501

Tips & Tools

More information is a click away. We have a variety of educational primers, application notes, maintenance guides, and literature available from Agilent for free.

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GENERAL LC SUPPLIES

Agilent offers a wide range of supplies for operation and maintenance of LC systems. These products have been carefully designed or selected by Agilent to work with your Agilent instruments for maximum performance and uptime.

LC Capillaries and Tubing

Stainless Steel Capillaries

- Made of flexible stainless steel (0.6 mm OD) with 1/16 in. OD tubing at both ends to accept standard fittings
- Pre-swaged fittings are assembled according to Swagelok specifications

Stainless Steel Capillaries for 1100/1200 LC Systems

From	To	ID (mm)	Length (mm)	Material*	Color Code	Fittings/Connection	Part No.
Pump	Autosampler	0.17	600	SS	Green	Pre-swaged	G1312-67305
		0.25	130	SS	Blue	Pre-swaged	01090-87308
		0.25	320	SS	Blue	Pre-swaged	79835-87638
		0.17	500	SS	Green	Non-swaged	G1328-87600
	Manual valve	0.17	900	SS	Green	1 end pre-swaged	G1329-87300
	Universal	0.25	700	SS	Blue	1 end pre-swaged	01018-67305
	1 multi assembly	0.6	173	SS		Male to male	G1361-67300
	1 multi assembly	0.6	175	SS		Male to male	G1361-67301
	Restriction capillary			SS		A/A	G1312-67302
SSV/MCGV	AIV		Pre-swaged	PTFE		Pre-swaged	G1311-67304
OBV	Piston 2	0.6	230	SS		Pre-swaged	G1312-67300
Mixing capillary	Damper	0.17	495	SS	Green	Pre-swaged	G1312-67304
Damper	Mixer	0.25	130	SS	Blue	Pre-swaged	01090-87308
Damper	Purge valve			SS		A/A	G1312-67301
Filter	EMPV			SS		A/A	G1375-87400
Needle seat	Injection valve			SS		-C	G1329-87101
EMPV	Next module	0.6	400	SS		Male to male	G1361-67302
EMPV	Multi assembly	0.5	160	SS		Male to male	G1361-67303

*SS = stainless steel

(Continued)

Stainless Steel Capillaries for 1100/1200 LC Systems

From	To	ID (mm)	Length (mm)	Material*	Color Code	Fittings/Connection	Part No.
Union	EMPV2	0.6	111	SS		Male to female	G1361-67304
Union	Mixer	0.6	40	SS		Male to female	G1361-67305
EMPV1	Union	367	0.6	SS		Male to female	G1361-67306
Autosampler	Column	0.12	180	SS	Red	1 end pre-swaged	G1313-87304
		0.12	280	SS	Red	1 end pre-swaged	01090-87610
		0.12	105	SS	Red	1 end pre-swaged	01090-87611
		0.17	180	SS	Green	1 end pre-swaged	G1313-87305
		0.17	280	SS	Green	1 end pre-swaged	01090-87304
		0.17	800	SS	Green	1 end pre-swaged	01048-87302
		0.17	130	SS	Green	1 end pre-swaged	01090-87305
		0.5	600	SS			G2260-87300
Manual valve	Column	0.17	500	SS	Green	Non-swaged	G1328-87600
Column compartment	Column	0.12	70	SS	Red	1 end pre-swaged	G1316-87303
Detector	Waste	0.17	90	SS	Green	Non-swaged	G1316-87300
Column	DAD	0.12	150	SS	Red	Pre-swaged	G1315-87312
		0.17	380	SS	Green	Pre-swaged	G1315-87311
Column	VWD	0.18	40	PEEK	Inlet capillary, 0.17 mm ID, 600 mm long		5062-8522
		0.12	105	SS	Red	Without fittings	5021-1820
		0.12	150	SS	Red	Without fittings	5021-1821
		0.12	280	SS	Red	Without fittings	5021-1822
		0.12	400	SS	Red	Without fittings	5021-1823
		0.12	70	SS	Red	1 end pre-swaged	G1316-87303
		0.17	105	SS	Green	Without fittings	5021-1816
		0.17	150	SS	Green	Without fittings	5021-1817
		0.17	280	SS	Green	Without fittings	5021-1818
		0.17	400	SS	Green	Without fittings	5021-1819
		0.17	90	SS	Green	With fittings	G1316-87300
VWD	Waste	0.25	48	PEEK	Waste capillary, PEEK, 0.25 mm ID		5062-8535
Injector valve	Waste	0.25	120	SS	Blue		G1377-87301
Injector valve	Prep head	0.5	160	SS			G2258-87301
Description		ID (mm)	Length (mm)	Material*	Color Code	Fittings/Connection	Part No.
Stainless steel capillary		0.12	210	SS	Red	Pre-swaged	G1316-87328
Stainless steel capillary		0.17	250	SS	Green	Pre-swaged	G1367-87304
Stainless steel capillary		0.12	250	SS	Red	1 end pre-swaged	G1373-87300

*SS = stainless steel

Stainless Steel Capillaries for 1260 Infinity LC and 1200 Rapid Resolution LC Systems

From	To	ID (mm)	Length (mm)	Connection	Fittings	Part No.
Pump	Autosampler	0.17	400	Male to male	Pre-swaged	G1312-87303
	Cooled autosampler	0.17	700	Male to male	Pre-swaged	G1312-87304
Damper	Pressure sensor	0.17	150	Male to male	Pre-swaged	G1312-87305
Damper	Mixer	0.17	105	Male to male	Pre-swaged	G1312-87306
Mixer	Outlet valve					
Column	Flow cell	0.17	150	Male to female	Non-swaged	G1315-87303
Cell out	MS	0.12	500	Male to male	1 end pre-swaged	G1315-87307
DAD heat exchanger capillary		0.17	310	Male to male	1 end pre-swaged	G1315-87319
DAD heat exchanger capillary		0.12	310	Male to male	1 end pre-swaged	G1315-87339
Valve	Valve	0.12	100	Male to male	Non-swaged	G1316-27301*
Micro valve	Regeneration pump	0.12	130	Male to female	Non-swaged	G1316-87304*
WPS	Micro valve	0.12	340	Male to male	1 end pre-swaged	G1316-87305*
Micro valve	Heat exchanger	0.12	75	Male to male	Non-swaged	G1316-87306*
TCC	MS	0.12	500	Male to male	1 end pre-swaged	G1316-87309
VWD						
Column	DAD cell	0.12	50	Male to female	Non-swaged	G1316-87312
		0.12	70	Male to female	Non-swaged	G1316-87313
		0.12	90	Male to female	Non-swaged	G1316-87314
		0.12	130	Male to female	Non-swaged	G1316-87315
		0.17	150	Male to female	Non-swaged	G1315-87303
WPS	TCC	0.12	170	Male to male	Non-swaged	G1316-87316
		0.12	210	Male to male	Non-swaged	G1316-87317

*0.8 mm OD stainless steel capillaries – use 0.8 mm ID fittings

(Continued)

Stainless Steel Capillaries for 1260 Infinity LC and 1200 Rapid Resolution LC Systems

From	To	ID (mm)	Length (mm)	Connection	Fittings	Part No.
Cooled WPS	TCC	0.12	300	Male to male	Non-swaged	G1316-87318
		0.12	340	Male to male	Non-swaged	G1316-87319
Column	Cooler (50-150 mm column)	0.17	105	Male to male	Non-swaged	G1316-87321
	Cooler (20-30 mm column)	0.17	170	Male to male	Non-swaged	G1316-87323
Micro valve	Detector	0.12	75	Male to female	Non-swaged	G1316-87326*
Column	DAD cell	0.12	170	Male to female	Non-swaged	G1316-87327
WPS	10 port valve	0.12	210	Male to male	Pre-swaged	G1316-87328*
10 port valve	Column	0.12	100	Male to male	Non-swaged	G1367-87303*
WPS	TCC	0.17	250	Male to male	Pre-swaged	G1367-87304
Description		ID (mm)	Length (mm)	Connection	Fittings	Part No.
DAD heat exchanger capillary		0.17	310	Male to male	1 end pre-swaged	G1315-87319
DAD heat exchanger capillary		0.12	310	Male to male	1 end pre-swaged	G1315-87339
Absorber capillary, 500 µL		0.17	1770	Male to male	Pre-swaged	G1312-87300
Calibration capillary assembly						G1312-67500
Stainless steel restriction capillary, T-piece to pressure sensor		0.17				G1312-87301
Column connecting capillary with fittings		0.17	90	Male to male	Non-swaged	G1316-87300
Flexible capillary		0.17	280		Without fittings	5021-1818
Stainless steel capillary		0.17	230	Male to male	Pre-swaged	5067-1570
Stainless steel capillary		0.17	320	Male to male	Pre-swaged	5067-1571
Stainless steel capillary		0.17	150	Male to female	Pre-swaged	5067-1572

*0.8 mm OD stainless steel capillaries – use 0.8 mm ID fittings

Tips & Tools

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Stainless Steel Connection Capillaries for 1290 Infinity LC

From	To	ID (mm)	Length (mm)	Fittings	Part No.
Pump	Autosampler	0.17	300	Pre-swaged	5067-4657
Pump	Thermostatted Autosampler	0.17	450	Pre-swaged	5067-4658
Autosampler	TCC	0.12	340	Non-swaged	5067-4659
TCC	DAD	0.12	220	Non-swaged	5067-4660
1290 LC System	CTC Autosampler	0.17	600	Pre-swaged	5067-4670
CTC Autosampler	Column	0.12	600	Non-swaged	5067-4669
Autosampler	Valve	0.12	340	Pre-swaged	5067-4647
Autosampler	Valve	0.12	340	1200 bar removable fitting	5067-4744
Autosampler	Valve (dual stack)	0.12	500	1200 bar removable fitting	5067-4745
Second pump	Valve	0.17	700	Pre-swaged	5067-4648
Valve	HX1-HX2	0.12	90	Pre-swaged	5067-4649
Valve	Heat exchanger	0.12	150	Pre-swaged	5067-4735
Column	Valve (short)	0.12	150	Non-swaged	5067-4650
Column	Valve (short)	0.12	170	Non-swaged	5067-4736
Column	Valve (long)	0.12	280	Non-swaged	5067-4651
Valve	Valve	0.12	120	Pre-swaged	5067-4652
Valve	Valve	0.12	150	Pre-swaged	5067-4737
Valve	Detector	0.12	200	Pre-swaged	5067-4653
Valve	Detector	0.12	200	1200 bar removable fitting	5067-4746
Filter	Purge valve	0.25	250	Pre-swaged	5067-4655
Pressure sensor	Purge valve	0.25	80	Pre-swaged	5067-4656
Mixer	Purge valve	0.17	140	Pre-swaged	G4220-87000
Valve	Metering device	0.17	160	Pre-swaged	G4226-60301

Flexible Stainless Steel Capillaries Without Fittings

ID (mm)	Length (mm)	Color Code	Volume (μL)	Part No.
0.12	105	Red	1.2	5021-1820
	150	Red	1.7	5021-1821
	200	Red	2.3	5065-9935
	280	Red	3.2	5021-1822
	400	Red	4.5	5021-1823
	500	Red	5.6	5065-9964
0.17	105	Green	2.4	5021-1816
	150	Green	3.4	5021-1817
	200	Green	4.6	5065-9931
	280	Green	6.4	5021-1818
	400	Green	9.1	5021-1819
	600	Green	13.6	5065-9933
	700	Green	15.9	5065-9932
	900	Green	20.5	5065-9963
0.25	250	Blue	12.3	5065-9979
	280	Blue	13.8	5022-6508
	320	Blue	15.8	5065-9980
	800	Blue	39.3	5065-9930
0.50	105	None	20.6	5065-9927
	150	None	29.5	5022-6509
	280	None	55	5022-6510
	800	None	157	5065-9926

Peek Coated Fused Silica Capillaries

PEEK Coated Fused Silica Capillaries for use with 20 μ L/min Flow Range

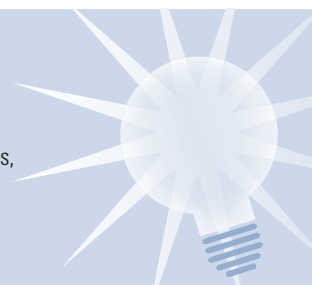
From	To	ID (μ m)	Length (mm)	Fitting Type	Part No.
EMPV	Flow sensor	50	220	B/B	G1375-87301
Flow sensor	Injection valve	50	550	B/C	G1375-87310
Injection valve	Metering device	50	200	B/C	G1375-87302
Metering device	Needle	100	110	B/B	G1375-87303
Injection valve	Column	50	500	C/D	G1375-87304
Column	Detector	50	400	D/E	G1315-68703
Detector	Waste	75	700	E/-	G1315-68708
μ -switching valve	Column	50	280	C/D	G1375-87309

PEEK Coated Fused Silica Capillaries for use with 100 μ L/min Flow Range

From	To	ID (μ m)	Length (mm)	Fitting Type	Part No.
EMPV	Flow sensor	100	220	B/B	G1375-87305
Flow sensor	Injection valve	100	550	B/C	G1375-87306
Injection valve	Metering device	100	200	B/C	G1375-87312
Metering device	Needle	100	110	B/B	G1375-87303
Injection valve	Column	75	500	C/D	G1375-87311
Column	Waste	75	400	D/E	G1375-87308
Detector	Detector	75	700	E/-	G1315-68708
μ -switching valve	Waste	50	280	C/D	G1375-87309

Tips & Tools

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PEEK Coated Fused Silica Capillaries for Nano LC

From	To	ID (µm)	Length (mm)	Fitting Type	Part No.
Switching valve	Column	25	100	C/D	G1375-87320
EMPV	Flow sensor	25	220	B/B	G1375-87321
Flow sensor	Injection valve	25	350	B/C	G1375-87322
Injection valve	Flow sensor	25	550	C/D	G1375-87323
Switching valve	Column				
Switching valve	Column	25	700	C/D	G1375-87324
Switching valve	Column	50	100	C/D	G1375-87325
Injection valve	Injector seat or 2nd pump	75	650	C/D	G1375-87327

Generic Connecting Capillaries for Capillary LC System

From	To	Fitting Type	Part No.
SSV	AIV		G1311-67304
OBV	Piston 2	A/A	G1312-67300
Pump	Restriction capillary	A/A	G1312-67302
Mixing capillary	Damper	A/A	G1312-67304
Damper	Mixer	A/A	01090-87308
Mixer	Filter	A/A	01090-87308
Filter	EMPV	A/A	G1375-87400
Needle seat	Injection valve	-C	G1329-87101



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 in. OD

PEEK Tubing

ID (mm)	Length (m)	Color Code	Part No.
0.50	1.5	Orange	0890-1761
0.25	1.5	Blue	0890-1762
0.25	5	Blue	5042-6463
0.18	1.5	Yellow	0890-1763
0.18	5	Yellow	5042-6462
0.13	1.5	Red	0890-1915
0.13	5	Red	5042-6461

Other Tubing

Description	Length (m)	ID (mm)	OD (mm)	Part No.
PTFE tubing, FEP, primary use for valve solutions	5	0.7	1.6	5062-2462
PTFE solvent tubing, primary use for flow path from solvent bottle to degasser, to pump	5	1.5	3.1	5062-2483
Corrugated tubing, polypropylene	5	6.5		5062-2463
Silicone tubing	5	1	3	5065-9978
Clamps and micro clamps, 10/pk				5065-9976
Barbed Y-Connector PP for 3/16 in. ID tube, 10/pk				5065-9971
For G2258A 1100/1200 Series Dual Loop Autosampler				
Front seat tube, SS	0.1	0.5		G2258-87316
Back seat tube, SS	0.12	0.5		G2258-87315
Front seat tube, PTFE	0.1	0.2		G2258-87312
Back seat tube, PTFE	0.12	0.25		G2258-87313
Waste tube	0.15	0.8		G2258-87310
Waste tube	0.1	0.8		G2258-87311
Drawing tube assembly for flush solvent with filter and bottle cap				G2258-87307
Tubing assembly, solvent flush				G2258-87314
For G1313/27/29A 1100/1200 Series Autosampler				
Waste tube				G1313-87300
Waste tubing, 5 m, 6.5 mm ID, corrugated polypropylene	5	6.5		5062-2463
For G1387A 1100/1200 Series Micro Autosampler				
Waste tube, FEP		0.8	1.6	G1375-87326



Plastic tubing cutter, 8710-1930

Accessories

Description	Part No.
Plastic tubing cutter	8710-1930
Blades for plastic tubing cutter, 5/pk	8710-1931
Fitting screws, stainless steel, 10-32, 4 mm, 5/pk	5065-9948
PEEK ferrule and stainless steel ring for 2 mm tube, 5/pk	5065-9950
Union, PEEK for 1/8 in. OD tubing	0100-2410
Waste adapter, 1200 Series autosamplers, gray	G1313-43216



Fitting screws, 5065-9948

Rigid Capillary Tubing

- Squarely cut, pre-cleaned and ready to use
- Use with stainless steel fittings and ferrules (P/N 5062-2418) or PEEK fittings (P/N 0100-1516)



PEEK ferrules and SS rings, 5065-9950

Rigid Capillary Tubing

Length (mm)	ID (mm)	Unit	Part No.
100	0.17	10/pk	5061-3361
200	0.17	10/pk	5061-3362



Stainless steel fittings, 5062-2418



Stainless steel long fittings, 5065-4454



PEEK fittings, 5063-6591



PEEK long fittings, 5062-8541



Finger-tight PEEK fittings, 5065-4426



Double winged fitting, 5042-6500



PEEK RheFlex fittings, 0100-1631

LC Fittings, Ferrules and Unions

To ensure leak-free connections — and to prevent the loss of peak shape and resolution — always use the manufacturer's recommended fitting style with columns, valves, and unions. For example:

- Different columns have different fitting requirements (ZORBAX columns use standard Swagelok fittings)
- Agilent 1100/1200 modules use standard Swagelok fittings
- Rheodyne injection valves require Rheodyne fittings

Fittings for 1/16 in. OD Capillaries

Description	Contents	Unit	Part No.
1/16 in. stainless steel fitting	Includes nut, front and back ferrules	10/pk	5062-2418
1/16 in. stainless steel long fitting	Includes nut, front and back ferrules	10/pk	5065-4454
1/16 in. stainless steel extra long fitting	Includes nut, front and back ferrules	10/pk	5065-9967
1/16 in. stainless steel fitting		10/pk	5061-3303
1/16 in. stainless steel front ferrule		10/pk	5180-4108
1/16 in. stainless steel back ferrule		10/pk	5180-4114
1/16 in. finger-tight PEEK fitting	1 piece, beige	10/pk	5063-6591
1/16 in. finger-tight PEEK fitting	1 piece, beige	2/pk	0100-1516
1/16 in. finger-tight PEEK long fitting	1 piece, beige	10/pk	5062-8541
1/16 in. finger-tight PEEK fitting	1 each: yellow, blue, black, green, red	10/pk	5065-4426
1/16 in. double winged PEEK fittings	Includes nut and ferrule	10/pk	5042-6500
1/16 in. PEEK RheFlex fittings	Includes nut and ferrule	5/pk	0100-1631
1/16 in. PEEK RheFlex fittings	Includes nut and ferrule, colored	10/pk	0100-2175

(Continued)



ChromTrac identifiers, 0350-1402



1200 bar removable fitting, 5067-4733

Fittings for 1/16 in. OD Capillaries

Description	Contents	Unit	Part No.
ChromTrac identifiers	2 each: black, green, white; 4 each: yellow, blue, red	20/pk	0350-1402
1/16 in. stainless steel blanking nut			01080-83202
1/16 in. stainless steel nut, PEEK ferrule	Includes stainless steel nut and PEEK ferrule	6/pk	5067-1540
1/16 in. PEEK ferrule For use with 5067-1540 fitting		6/pk	5067-1547
1/16 in. plastic fitting			0100-1259
1/16 in. finger-tight polyketone fittings		10/pk	5042-8957
1/16 in. 0.8 mm ID stainless steel ferrule		6/pk	5067-1557
1/16 in. 0.8 mm ID stainless steel fitting, M4/4 mm		6/pk	5067-1558
1/16 in. 1200 bar removable fitting			5067-4733
1/16 in. 1200 bar removable long fitting			5067-4738
1/16 in. 1200 bar removable extra long fitting			5067-4739

Replacement Fittings and Ferrules for Capillary and Nano Flow System

Graphic	Description	Fitting Type	Part No.
	1/16 in. stainless steel fittings, front and back ferrules, 10/pk	A	5062-2418
	1/16 in. stainless steel fittings, male, 4 mm, 10/pk	B	5063-6593
	1/32 in. ferrule and stainless steel lock ring, 10/pk	B	5065-4423
	6 fittings, 2 plugs, PEEK for μ-valves	C	5065-4410
	Double winged PEEK nuts and 1/32 in. ferrules, 10/pk	D	5065-4422
	PEEK fitting, long for 1/32 in. OD capillary	D	5022-6536



ZDV union with fittings, 0100-0900



High flow union, 5022-2133



Micro T-connector, PEEK, 5042-8519

Unions

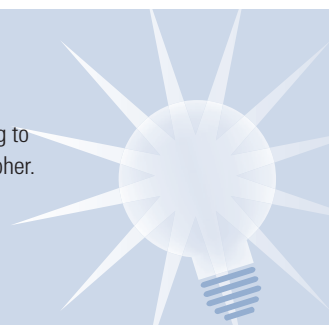
Description	Use With	Part No.
True ZDV union, no fittings	Nano LC	5022-2145
Universal ZDV union, stainless steel, no fittings	Capillary/Nano/Standard LC	5022-2184
ZDV union, with fittings	Standard LC	0100-0900
ZDV union, PEEK with fittings	Bio-applications	0100-2441
High flow union, no fittings	Prep LC	5022-2133
PEEK adapter 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 to female 1/4-28		5042-8517
Adapter, male luer to female 1/4-28		5042-8518
Adapter, female to male 10-32 to 1/4-28 stainless steel		5023-1803
T-connector, PEEK, swept volume 0.57 µL	For 1/16 in. OD tubing	5022-2144
Micro T-connector, PEEK, swept volume 29 nL, with 1/32 in. ID fittings		5042-8519

Tips & Tools

Agilent offers a variety of e-Seminars and on-site training to help you learn how to be a more effective chromatographer.

For more information, visit

www.agilent.com/chem/education





Capillary and Fittings Kits

Agilent starter kits contain the most often used capillaries and fittings. We included our genuine flexible stainless steel capillaries to make the best connection in your LC system, no matter the brand. The kits are for use with 3-4 or 1-2 mm ID columns, as well as for Micro LC columns. The free Cybertool, which contains over 30 tools, is useful in every laboratory.

Capillary and Fittings Kits

Description	Contents	Part No.
Capillary/fitting starter kit, 0.12 mm ID	Kit includes: Qty 1 – PEEK capillary, 0.13 mm ID, 1.5 m Qty 4 – Stainless steel capillary, 105 x 0.12 mm Qty 4 – Stainless steel capillary, 150 x 0.12 mm Qty 2 – Stainless steel capillary, 170 x 0.12 mm Qty 2 – Stainless steel capillary, 200 x 0.12 mm Qty 2 – Stainless steel capillary, 220 x 0.12 mm Qty 2 – Stainless steel capillary, 280 x 0.12 mm Qty 1 – Stainless steel capillary, 400 x 0.12 mm Qty 3 – Stainless steel ZDV union Tubing cutter for PEEK capillaries 1/16 in. stainless steel fittings, 10/pk 1/16 in. PEEK fittings, color, 10/pk 1/16 in. PEEK fittings, 10/pk Rheotool Cybertool	5065-9937
Capillary/fitting starter kit, 0.17 mm ID	Kit includes: Qty 1 – PEEK capillary, 0.18 mm ID, 1.5 m Qty 4 – Stainless steel capillary, 105 x 0.17 mm Qty 4 – Stainless steel capillary, 150 x 0.17 mm Qty 2 – Stainless steel capillary, 200 x 0.17 mm Qty 2 – Stainless steel capillary, 280 x 0.17 mm Qty 1 – Stainless steel capillary, 400 x 0.17 mm Qty 3 – Stainless steel ZDV union Tubing cutter for PEEK capillaries 1/16 in. stainless steel fittings, 10/pk 1/16 in. PEEK fittings, color, 10/pk 1/16 in. PEEK fittings, 10/pk Rheotool Cybertool	5065-9939

(Continued)

Capillary and Fittings Kits

Description	Contents	Part No.
Capillary/fitting starter kit for 1100 Capillary LC System	Kit includes: Qty 2 – Fused silica/PEEK capillary, 50 µm, 55 cm Qty 1 – Fused silica/PEEK capillary, 50 µm, 20 cm Qty 1 – Fused silica/PEEK capillary, 100 µm, 110 cm Qty 2 – Fused silica/PEEK capillary, 50 µm, 50 cm Qty 2 – Fused silica/PEEK capillary, 50 µm, 40 cm Qty 4 – 4 mm stainless steel fitting, male 10-32 Qty 4 – 1/32 in. PEEK ferrule and stainless steel lock ring Qty 4 – PEEK fittings for µ-valves Qty 4 – Double winged PEEK nuts and 1/32 in. ferrules Cybertool	5065-9938
Rapid Resolution High Throughput capillary kit	Kit includes: Qty 1 – PEEK fitting long for 1/32 in. OD capillaries Qty 1 – Stainless steel capillary, 280 x 0.12 mm Qty 1 – Stainless steel capillary, 150 x 0.12 mm Qty 1 – Stainless steel capillary, 70 x 0.12 mm Qty 1 – Needle seat capillary, 12 µL x 0.12 mm Qty 1 – PEEK capillary, 550 x 0.125 mm	5065-9947
1200 capillary kit for 0.12 mm ID	Kit includes: Qty 1 – Stainless steel capillary, 130 x 0.12 mm Qty 2 – Stainless steel capillary, 170 x 0.12 mm Qty 1 – Stainless steel capillary, 210 x 0.12 mm Qty 1 – Stainless steel capillary, 300 x 0.12 mm Qty 3 – Stainless steel capillary, 500 x 0.12 mm Qty 1 – Stainless steel capillary, 500 x 0.12 mm Qty 1 – Stainless steel capillary, 700 x 0.12 mm Qty 1 – Stainless steel capillary, 340 x 0.12 mm Qty 1 – Low carry over seat Qty 1 – DAD heat exchanger capillary, 310 x 0.12 mm	G1316-68716
Stainless steel flexible capillary tubing kit	Kit includes: Qty 10 – 1/16 in. stainless steel back ferrules Qty 10 – 1/16 in. stainless steel front ferrules Qty 10 – Stainless steel fittings Qty 3 – Stainless steel capillary, 105 x 0.12 mm Qty 1 – Stainless steel capillary, 150 x 0.12 mm Qty 1 – Stainless steel capillary, 280 x 0.12 mm	5061-3304
Stainless steel flexible capillary tubing kit	Kit includes: Qty 2 – Stainless steel capillary, 35 x 0.12 mm Qty 3 – Stainless steel capillary, 105 x 0.12 mm Qty 1 – Stainless steel capillary, 280 x 0.12 mm	5061-3315
Low dispersion capillary kit	Kit includes: Qty 1 – Stainless steel capillary, 200 x 0.12 mm, with removable fitting Qty 1 – Stainless steel capillary, 340 x 0.12 mm, with removable fitting Qty 1 – Stainless steel capillary, 500 x 0.12 mm, with removable fitting Qty 4 – Stainless steel capillary, 150 x 0.12 mm, with 1 long/1 short pre-swaged fittings Qty 1 – Stainless steel capillary, 150 x 0.12 mm, with 2 long pre-swaged fittings Qty 4 – Stainless steel capillary, 170 x 0.12 mm	5067-4729

LC Tools

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.



Mounting tool, 0100-1710



Capillary mounting tool, G1377-44900



HPLC system tool kit, G4203-68708

LC Tools

Description	Part No.
Tool kit hex keys, Rheotool	5064-8211
Includes 3 hex keys, 4 mm, 1.5 mm, and 9/64 in., with straight or T-handle plus Rheotool	
Torque wrench adapter	G1315-45003
Used with nanoliter flow cell for Diode Array Detector to mount capillaries of cell (P/N G1315-68714)	
Insert tool (seal wash option)	01018-23702
Mounting tool for flangeless nut	0100-1710
Tool for micro seat capillary mounting	G1377-44900
Simplifies the connection of micro seats with capillary	
Mounting clamp	5021-1866
Velocity regulator	5062-2486
USB memory stick	G4208-68700
Compact flash card	01100-68700
HPLC system tool kit	G4203-68708
Compact tool kit	G4296-68715



Semi-prep filter, 5064-8273



High pressure semi-prep filter, 5022-2165

HPLC In-Line Filters

Column inlet frit contamination can increase column back pressure 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 in-line filter kits for use with any HPLC system.

Universal Solvent Filter

Ideal for microbore, narrow-bore, high-speed or standard analytical columns

Universal solvent filters are installed between the LC pump and injector, so particles from the solvent can be removed before they reach the injector. The filter assembly consists of a 4.8 mm frit, two inserts and a two-piece holder. The frit is placed between the tapered edges of the inserts in such a way that the solvent is evenly distributed over the whole surface of the frit. This provides efficient filtration and extends the life of the frit.

Low-volume Column Inlet Filter

A high-capacity filter with built-in efficiency

The low-volume column inlet filter is positioned immediately before the LC column, so it can remove particles from both the injection system and the sample. With a frit diameter of only 2.1 mm – plus tapered inserts – this filter minimizes external band spreading while maximizing filtration capacity.



RRLC in-line filter, 5067-1551



Low dispersion in-line filter, 01090-68702



1290 Infinity in-line filter, 5067-4638

In-Line Filters

Low dispersion in-line filter

- Positioned immediately before the LC column
- Removes particles from the sample and injection system
- Minimizes external band spreading due to frit diameter of only 2.1 mm and tapered inserts
- Can be used with any microbore, high speed, or standard analytical columns

Universal in-line filter

- Installed between the LC pump and injector to remove particles from the solvent
- Uses a high capacity filter
- Frit is placed between the tapered edges of the inserts so the solvent is evenly distributed over the filtering frit

HPLC In-Line Filters

Description	Frit Porosity (µm)	Frit Inlet ID (mm)	Comments	Part No.	Replacement Frits
RRLC in-line filter 4.6 mm, 0.2 µm pore size filter, connecting capillary, max 600 bar	0.2	4.6	max 600 bar	5067-1553	5067-1562, 10/pk
RRLC in-line 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, 10/pk
Low dispersion in-line 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 in-line 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
Semi-prep filter	0.5	12.7	1-5 mL/min	5064-8273	5022-2185
High pressure semi-prep filter	10	19	5-10 mL/min	5022-2165	5022-2166, 10/pk
Prep filter	10		10-100 mL/min	5065-4500	5065-9901 Replacement Glass Cartridge
In-line filter for G1311A	Recommended when high salt concentrations are used			G1311-60006	
1290 Infinity in-line filter (0.3 µm)	0.3	2.0	1200 bar	5067-4638	5023-0271, 5/pk

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, 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 1/8 in. OD tubing	G2258-23201	7	3.2
Solvent inlet filter, stainless steel	For use in capillary and nano systems	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 1/8 in. 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



Glass filter, 5041-2168



Solvent inlet filter, 01018-60025



Glass solvent filter degasser, 3150-0577

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
PTFE coated sieve	5188-2744
PTFE seal	5188-2745
Funnel base, glass	5188-2746
Filter Membranes	
Regenerated cellulose filter membranes	3150-0576
Diameter 47 mm, pore size 0.45 µm, 100/pk	
Nylon filter membranes	9301-0895
Diameter 47 mm, pore size 0.45 µm, 100/pk	
PTFE filter membranes	3150-0509
Diameter 47 mm, pore size 0.45 µm, 10/pk	

Biocompatibility Kit



PEEK RheFlex fittings, 0100-1631



PEEK fittings, 5063-6591

Biocompatibility Kit

Description	Part No.
Biocompatibility kit	5065-9972
Needle seat PEEK without capillary, G1313A	G1313-87104
Needle assembly, for use with PEEK seat	G1313-87203
PEEK seat tubing, 0.17 mm ID, 100 mm, 2.3 µL	G1313-87302
PEEK capillary, 0.25 mm ID, 160 mm connecting valve with metering device of G1313 autosampler	G1313-87306
PEEK loop capillary for 100 µL sample	G1313-87309
Rotor seal, PEEK, 2-groove for G1367B, 400 bar	0100-2231
ZDV union, PEEK with fittings	0100-2441
1/16 in. PEEK RheFlex fittings	0100-1631
PEEK tubing, 0.25 mm ID, 1.5 m	0890-1762
PEEK tubing, 0.18 mm ID, 1.5 m	0890-1763
Solvent inlet filter, PTFE, 10 µm pore stepped tubing connector, metal free	3150-0958
1/16 in. finger-tight PEEK fitting	5063-6591

Tips & Tools

Don't forget, we have special offers throughout the year.

To learn more, visit www.agilent.com/chem/specialoffers



LC Standards

LC Standards

Description	Part No.
Caffeine standards kit for LC OQ/PV Includes one 10 mL ampoule: 125.0 µg/mL; four 5 mL ampoules: 5.0, 25.0, 250.0 and 500.0 µg/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 µg/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 µg/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
RRLC Check out sample, 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 033 ng/µL crystal violet, 77 ng/µL carbazole, 300 ng/µL 9-phenanthrol, 1 ng/µL 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



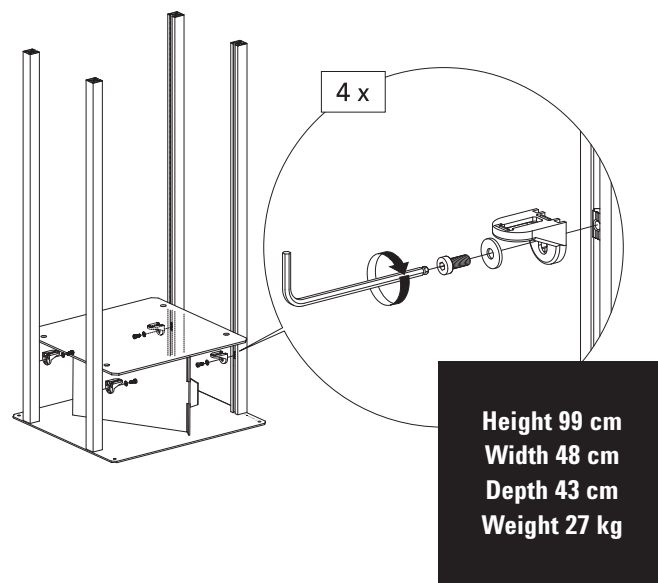
Agilent rack for LC systems, 5001-3726

Agilent Rack for LC Systems

Reclaim critical bench space with the stable, robust rack for LC systems. The sturdy and open design offers complete protection for your sensitive LC system and easy maintenance for fast, safe access to instruments and cables. It is designed for all Agilent LC modules stacks and features:

- Easy assembly saves time and expense (see diagram)
- Adjustable shelves allow full customization for all Agilent LC modules
- Open design ensures proper airflow management and distribution of equipment and cabling

Description	Part No.
Agilent rack for LC systems	5001-3726





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.

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.

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 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

Purge Valves

Purge Valves

Description	Comments	Part No.
Purge valve assembly	For 1260 Infinity LC Iso/Quat/Bin/SFC pumps, includes PTFE frit	G1312-60061
Purge valve assembly	For 1220 Infinity LC pumps, includes PTFE frit	G4280-60061
Purge valve assembly	For 1120 pump, includes PTFE frit	G4280-60031
Purge valve assembly, 400 bar	For 1100/1200 pumps, 1260 Cap and Nano pumps, includes PTFE frit	G1311-60009
Purge valve assembly, 600 bar	For 1200 RRLC pump, includes PTFE frit	G1312-60023
5 position/7 port rotor seal	For 1290 Infinity LC purge valve	5068-0005
5 position/7 port stator	For 1290 Infinity LC purge valve	5068-0004
Purge valve actuator	For 1120 pump	G4280-60033
PTFE frits, 5/pk	For 1100/1120/1200/1200 RRLC and 1220/1260/1290 Infinity LC Pumps*	01018-22707
Seal for purge valve	For 1120 pump	0905-1192

*Please note: the 1220 is not an Infinity LC pump



Purge valve assembly, G1311-60009



PTFE frits, 01018-22707

Inlet and Outlet Valves



Active inlet valve, G1312-60025



Cartridge, 400 bar, 5062-8562



Outlet ball valve, G1311-60012

Inlet and Outlet Valves

Description	Comments	Part No.
Active Inlet Valve (AIV)		
Active inlet valve, without cartridge	For 1100/1200/1200 RRLC, 1260 Infinity LC Binary/Cap/Nano pumps	G1312-60025
Cartridge for active inlet valve, 400 bar	For 1100/1200, 1260 Infinity LC Cap/Nano pumps	5062-8562
Cartridge for active inlet valve, 600 bar	For 1200 RRLC, 1260 Infinity LC Binary pumps	G1312-60020
Passive Inlet Valve (PIV)		
Passive inlet valve	For 1260 Infinity LC SFC pumps	G1312-60066
Passive inlet valve	For 1260 Infinity LC Iso/Quat pumps, 1120 and 1220 Infinity LC pumps	G4280-60036
Inlet valve	For 1290 Infinity LC	G4220-60022
Valve		
Valve assembly, inlet/outlet	For 1200/1260 Infinity prep pumps	G1361-60012
Outlet Ball Valve		
Outlet valve	For 1260 Infinity LC Cap/Nano/SFC pump*	G1312-60067
Outlet ball valve	For quaternary, isocratic 1100/1200 and 1120 pumps	G1311-60012
	For 1100/1200 binary pumps, 1120 pumps, 400 bar	G1312-60012
	For binary SL pumps, 1260 Infinity LC Iso/Quat/Bin/1220 pumps, 600 bar	G1312-60022
	For 1290 Infinity LC	G4220-60028
Gold seal, outlet	For 1100/1200/1200 RRLC and 1120 pumps	5001-3707
Outlet caps, 4/pk	For 1100/1200/1200 RRLC and 1120 pumps	5062-2485
Sieves for outlet ball valve, 10pk	For G1312-60012 valve	5063-6505
Seal cap	For outlet ball valve 1290 Infinity LC, P/N G4220-60028, Compatible with P/N G1311-60012, G1312-60012 and G1312-60022	5067-4728

*Does not require an extra gold seal



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 the most durable – and longest lasting – pistons in the world
- 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 and Seals

Piston Description	Comments	Part No.	Seal Description	Part No.
Sapphire piston	For 1260 Infinity SFC pump	5067-4695	Piston seals, graphite filled PTFE (reversed phase), 2/pk	5063-6589
			Piston seals, polyethylene (normal phase)	0905-1420
Sapphire piston	For 1100/1200/1260 and 1120/1220 pumps	5063-6586	Piston seals, graphite filled PTFE (reversed phase), 2/pk	5063-6589
			Piston seals, polyethylene (normal phase)	0905-1420
Piston SSiC	For 1290 Infinity LC	5067-4603	Pump seal PE for 1290 Infinity Binary Pump	0905-1719
Sapphire plunger	For 1200 Prep Pump	G1361-22402	Piston seal for G1361A Preparative Pump	5022-2188

Tips & Tools

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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 backside of the seal with a wash solvent. Note: Water/isopropanol (90/10) is recommended as the wash solvent.



Peristaltic pump, 5042-8507

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
Peristaltic 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 Keeper		
Wash seal	For 1100/1200/1200 RRRLC, 1120 and 1260/1220 Infinity LC pumps	0905-1175
Seal keeper	For 1100/1200/1200 RRRLC and 1120 pumps	5001-3743
Wash seal gasket, 6/pk	For 1100/1200/1200 RRRLC, 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
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

Solvent Reservoir and Supplies



Solvent reservoirs



Prep bottle, 5065-4421

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



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



Safety Cap I, 5043-0223

Safety Caps

Description	Kit Contents	Part No.
Safety Cap II with 2 ports For NS29/32 ground neck bottles	Includes 2 fittings, PFA, 3.2 mm (1 blue, 1 red); 1 venting valve for SCAT safety caps, including air filter, 1 µm, PTFE membrane	5043-0221
Safety Cap II with 2 ports For GL45 threaded bottles	Includes 1 basic cap with 2 ports, polypropylene, blue, GL45, with PTFE cone; 2 fittings, PFA, 3.2 mm (1 blue, 1 red); 1 venting valve for SCAT safety caps, including air filter, 1 µm, PTFE membrane	5043-0222
Safety Cap I with 1 port For GL45 threaded bottles	Includes 1 basic cap with 1 port, polypropylene, blue, GL45, with PTFE cone; 1 fitting, PFA, 3.2 mm, black; 1 venting valve for SCAT safety caps, including air filter, 1 µm, PTFE membrane	5043-0223

(Continued)



Safety Cap II, 5043-0224



Safety Cap IV, 5043-0226



Safety Cap IV, 5043-0227



5 L waste can assembly, GL45, 5043-0242

Safety Caps

Description	Kit Contents	Part No.
Safety Cap II with 2 shut-off valves For GL45 threaded bottles	Includes 1 basic cap with 2 ports and 2 shut-off valves, polypropylene, blue, GL45, with PTFE cone; 2 fittings, PFA, 3.2 mm (1 blue, 1 red); 2 fittings, PTFE, 3.2 mm, white; 1 venting valve for SCAT safety caps, including air filter, 1 µm, PTFE membrane	5043-0224
Safety Cap I with 1 shut-off valve For GL45 threaded bottles	Includes 1 basic cap with 1 port and 1 shut-off valve, polypropylene, blue, GL45, with PTFE cone; 1 fitting, PFA, 3.2 mm, black; 1 fitting, PTFE, 3.2 mm, white; 1 venting valve for SCAT safety caps, including air filter, 1 µm, PTFE membrane	5043-0225
Safety Cap IV with 4 ports and 1 leak port For GL45 threaded waste bottles	Includes 1 basic cap with 4 ports and 1 port for leak hose, polypropylene, blue, GL45, with PTFE cone; 4 fittings, PFA (4 violet, 3.2 mm; 4 green, 1.6 mm); 1 leak hose, polypropylene Must be used with charcoal filter (P/N 5043-0230). Can be used with 2 port collector for leak connector, sidewise (spare part).	5043-0226
Safety Cap IV with 4 ports and 1 leak port For S60 threaded waste bottles	Includes 1 basic cap with 4 ports and 1 port for leak hose, polypropylene, black, S60, with PTFE cone; 4 fittings, PFA (4 violet, 3.2 mm; 4 green, 1.6 mm); 1 leak hose, polypropylene Must be used with charcoal filter (P/N 5043-0230). Can be used with 2 port collector for leak connector, sidewise (spare part).	5043-0227
5 L waste can assembly, GL45	Includes safety cap IV with 4 ports and 1 leak port, GL45 (P/N 5043-0226) and 2 ports collector, PTFE (P/N 5043-0235)	5043-0242
10 L waste can assembly, S60	Includes safety cap IV with 4 ports and 1 leak port, S60 (P/N 5043-0227) and 2 ports collector, PTFE (P/N 5043-0235)	5043-0243



Charcoal filter, 48 g, 5043-0230



Screw plug, 1/8 in., PTFE, 5043-0231



Venting valve with 1 µm PTFE membrane, 5043-0232



Screw plug, 1/4 in., PTFE, 5043-0233

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, 1/8 in., PTFE		5043-0231
Venting valve with 1 µm PTFE membrane*		5043-0232
Screw plug, 1/4 in., PTFE	5/pk	5043-0233
Thread adapter GL45-GL40, PTFE		5043-0234
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

Tips & Tools

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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

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



Ferrules and rings, 5063-6598



PPS nuts, 5063-6599

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
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
Dual channel micro degasser vacuum chamber	For G1379A	G1379-60010
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

Pump Kits

Pump Kits

Description	Kit Contents	Part No.
Start-up Kits		
Pump start-up kit For 1100/1200/1220 RRLLC 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 RRLLC 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 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 (0905-1503), PTFE frits, 5/pk (01018-22707), 1 seal cap (5067-4728), sieves for outlet valve, 10/pk (5063-6505)	G1312-68741
For 1100/1200 isocratic or quaternary pumps	Includes piston seal, PTFE frits, 2 gold seals and 2 outlet caps	G1310-68730

(Continued)



Pump start-up kit, G1311-68710

Maintenance Kits

Description	Kit Contents	Part No.
Preventive Maintenance Kits		
For 1200 Isocratic and Quaternary pump	Includes 4 piston seals, PTFE frits, 3 gold seals, 2 sieves and 3 outlet caps	G1312-68730
For G1376A Capillary Pump	Includes 4 pump seals, 4 stainless steel sieves, 4 gold seals, 1 stainless steel frit and 4 outlet caps	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, 2 gold seals, 4 outlet caps and 1 PEEK rotor seal	G4280-68710
For 1220 manual injector systems	Includes piston seals, PTFE frits, gold seals and rotor seal	G4280-68750
For 1220 automated injector systems	Includes piston seals, PTFE frits, gold seals, rotor seal, needle and needle seat	G4280-68770
For 1120 automated injector systems	Includes 1 piston seal, 5 PTFE frits, 2 gold seals, 4 outlet caps, 1 Vespel rotor seal, 1 needle and 1 needle seat	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 G1311-60012) 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 µm	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



Autosampler Supplies

Your Agilent autosampler is designed to deliver accurate measurements, precise injection volumes, and high-quality data. And by following a regular schedule of preventive maintenance, you can ensure a lifetime of defensible results.

Autosampler Maintenance Schedule

Procedure	Typical Procedure	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



Needles and Needle Seats

The needle should be replaced when it becomes bent, burred or blunt, or when it is leaking or plugged. You should suspect a leak if you notice a trail of buffer crystals on the needle seat. The needle seat can become blocked if the sample contains particulates, 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.
G1313A, G1329A/B, 1120, 1220 Infinity LC (automated sampler only)	Needle assembly, standard autosampler	G1313-87201	Standard needle seat 0.17 mm ID capillary, 2.3 µL	G1313-87101
			Standard needle seat 0.12 mm ID capillary, 1.2 µL	G1313-87103
G1313A, G1329A, 1120, 1220 Infinity LC (automated sampler only)	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 Infinity LC (automated sampler only)	Needle assembly, 900 µL upgrade	G1313-87202	Standard needle seat 0.17 mm ID capillary, 2.3 µL	G1313-87101
G1389A	Needle assembly, micro LC autosampler	G1329-80001	Micro LC Needle seat 100 µm ID capillary, 1.2 µL	G1329-87101
			Micro LC Needle seat 50 µm ID capillary, 0.3 µL	G1329-87103
G1367A/B	Needle assembly, well plate autosampler (green)	G1367-87200	Needle seat, well plate autosampler 0.17 mm ID capillary, 2.3 µL	G1367-87101
	Needle assembly, well plate autosampler (blue)	G1367-87201	Needle seat, well plate autosampler 0.12 mm ID capillary, 1.2 µL	G1367-87102

(Continued)

Needles and Needle Seats

Agilent Autosampler	Needle Assembly Description	Part No.	Compatible with Needle Seat	Part No.
G1367C SL and G1367D SL Plus	Needle assembly, well plate autosampler (black)	G1367-87202	Needle seat, 600 bar, with seat capillary 0.17 mm ID x 100 mm, 0.8 mm OD	G1367-87017
			Needle seat, 600 bar, with seat capillary 0.12 mm ID x 100 mm, 0.8 mm OD	G1367-87012
G1367E	Needle assembly, 1290/1260 Infinity LC autosampler	G4226-87201	Needle seat, 600 bar, with seat capillary 0.12 mm ID x 100 mm, 0.8 mm OD	G1367-87012
G1377A	Needle assembly, micro well 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
G2258A	Needle assembly, dual loop autosampler	G2258-68710	Twin needle seat, dual loop autosampler	G2258-87102
G2260A	Needle assembly, prep autosampler	G2260-87201	Needle seat, prep autosampler 0.5 mm ID, 20 µL	G2260-87101
G4226A	Needle assembly, 1290/1260 Infinity LC autosampler	G4226-87201	Seat assembly, 0.12 mm, 1290 Infinity LC autosampler	G4226-87012

Accessories for Needle Assemblies

Description	Use With	Part No.
Seat adapter	G1313A, G1329A, G1389A, G2260A, 1120 and 1220 Infinity LC	G1313-43204
Finger caps, 15/pk	G1313A, G1329A, G1389A, G2260A, 1120 and 1220 Infinity LC	5063-6506
Tool for micro seal capillary mounting	G1377A	G1377-44900



Seat assembly for 1290/1260 Infinity LC,
G4226-87012



Needle Assembly for 1290/1260 Infinity LC,
G4226-87201

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

Piston Description	Use With	Part No.	Seal Description	Part No.
Sapphire piston, 40 µL	G1367D, G1389A, G1377A, G4226A	5064-8293	Piston seal, 2 mm, for G1367D, G1389A, G1377A Piston seal for G4226A	5022-2175 0905-1717
Sapphire piston, 100 µL	G1313A, G1329A/B, G1367A/B/C, G1367E	5063-6586	Piston seals, graphite filled PTFE (reversed phase), 2/pk	5063-6589
Sapphire piston, 900 µL	G1313A, G1329A/B, G1367E	5062-8587	Metering valve seal	0905-1294
Piston, 5 mL	G2258A	G2258-60003	Piston seal	0905-1599



Sample loop, 01078-87302



Loop capillary, 20 µL, G4226-60310

Loop Capillaries

Description	Agilent Autosampler	Part No.
Stainless steel loop capillary, 100 µL	G1313A	01078-87302
	G1329A/B	
	1120	
	1220 Infinity LC	
	G1367A/B/C	G1367-87300
	G4226A	5067-4710
Stainless steel loop capillary, 900 µL	G1367E	
Stainless steel loop capillary, 900 µL	G1329A/B	G1313-87303
	G2260A	
Loop capillary, 40 µL	G1367D	G1377-87310
	G4226A	5067-4703
	G1367E	
	G1377A	G1377-87300
	G1389A	G1329-87302
Loop capillary, 20 µL	G4226A	G4226-60310
	G1367E	
Loop capillary, 8 µL	G1389A	G1375-87303
	G1377A	G1375-87315
Loop capillary, 5 mL	G2260A	G2260-68711

Autosampler Trays



Vial plate, G2255-68700



Vial plate, 5022-6539



Plate for safe lock tubes, 5022-6538

Autosampler Trays

Description	Part No.
For G1313A, G1329A/B, 1120, 1220 Infinity LC samplers	
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	G1313-44512
15 position tray for 6 mL vials	G1313-44513
External vial tray for 17 vials (disposal position)	G1313-60004
Disposal tube for external vial tray	G1313-27302
For G1367A/B/C/D/E, G2258A, G4226A	
Well plate tray, 2 well plates, 10 vials (supports 50 mm plates)	G2258-60011
Vial plate for 54 x 2 mL vials, 6/pk	G2255-68700
Vial plate for 15 x 6 mL vials	5022-6539
For G1367A/B/C/D/E	
100 position tray for micro vials	G4226-60021
Also for G4226A	
Plate for 27 Eppendorf safe lock tubes, 0.5/1.5/2 mL	5022-6538
For G2257A	
8.5 in. well plate rack, 2/pk	G2255-68709
For 16 shallow well plates, 4 deep well plates (max 48 mm height) or 6 vial racks	
10 in. well plate rack, 2/pk	G2255-68710
For 20 shallow well plates (max height 16 mm), not compatible with deep well plates	
8.5 in. well plate rack extension	G2255-68720
Includes 3 racks for 3 x 16 shallow well plates, 2 x 4 deep well plates (max 48 mm height) or 3 x 6 vial racks	
10 in. well plate rack extension	G2255-68730
Includes 3 racks for 3 x 20 shallow well plates (max height 16 mm), not compatible with deep well plates	
For G2250A	
205H rack, two 96-deep well plates	G2250-04504
200 rack, 13 x 100 mm tubes (9 mL), 96	G2250-04503
207 rack, 16 x 100 mm tubes (12 mL), 75	G2250-04502
209 rack, 12 x 32 mm tubes (12 mL), 96	G2250-04501
94A special holding 1100 tray	G2250-04500

Autosampler Kits

Autosampler Kits

Description	Kit Contents	Part No.
Preventive Maintenance Kits		
For G1329B autosamplers	Includes 1 PEEK rotor seal, 1 needle seat, 1 needle	G1313-68719
For G1313A, G1329A autosamplers	Includes 1 Vespel rotor seal, 1 needle seat, 1 needle, 2 metering seals and 15 finger caps	G1313-68709
For G1313A, G1329A samplers	Includes 1 Vespel rotor seal, 1 needle seat, 1 needle	G1313-68730
For G1367A/B autosamplers	Includes 1 Vespel rotor seal, 1 needle seat, 1 needle, 1 peristaltic pump cartridge, 1 seal tight nut	G1367-68730
For G1367E autosampler	Includes 1 PEEK rotor seal, 1 needle seat, 1 needle, 1 peristaltic pump cartridge, 1 metering seal	G1367-68741
For 1220 manual injector systems	Includes piston seals, PTFE frits, gold seals and rotor seal	G4280-68750
For 1220 automated injector systems	Includes piston seals, PTFE frits, gold seals, rotor seal, needle and needle seat	G4280-68770
For 1120 manual injector systems	Includes 1 piston seal, 5 PTFE frits, 2 gold seals, 4 outlet caps and 1 PEEK rotor seal	G4280-68710
For 1120 automated injector systems	Includes 1 piston seal, 5 PTFE frits, 2 gold seals, 4 outlet caps, 1 Vespel rotor seal, 1 needle and 1 needle seat	G4280-68730
Extended PM kit For G1313A, G1329A autosamplers	Includes 1 Vespel rotor seal, 1 needle seat, 1 needle, 1 metering seal, 1 stator face	5065-4498
Door Replacement Kits		
Cabinet upgrade kit for 1260 Infinity LC sampler	Includes side panel, top cover and front door	G1329-68736
Door replacement kit for 1260 Infinity LC sampler	Includes front and side doors	G1329-68737
Light protection kit for G1329A	Includes opaque front and side doors and front cover	G1329-68718
Door replacement kit for G1329A	Includes transparent front and side doors	G1329-68727
Upgrade Kits		
Multidraw upgrade kit for G1313A/G1327A/G1329A autosamplers	Includes 500 µL capillary, 1500 µL capillary and ZDV union	G1313-68711



Maintenance kit, G1313-68709



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.

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



Funnel tray for G1364C fraction collector,
G1364-84532



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



Vial plate, G2255-68700



Plate for safe lock tubes, 5022-6538

Collecting Tubes and Trays

Tray Part No.	Hole Diameter (mm)	No. of Tubes	Tube Dimensions	Tube Part No.	Unit
G1364-84523	30	40	30 x 100 mm	5042-6458	100/pk
			30 x 48 mm	5042-6470	100/pk
G1364-84524	25	60	25 x 100 mm	5042-6459	100/pk
G1364-84525	16	126	16 x 100 mm	5022-6532	250/pk
			16 x 48 mm	5022-6533	100/pk
G1364-84516	12	215	12 x 100 mm	5022-6531	250/pk
			12 x 48 mm	5022-6534	100/pk
G1364-84532	Funnel tray	40	Any size		

Well Plate Trays

Tray Part No.	Description	Well Plate Part No.	Description	Unit
G1364-84521	Tray for 4 well plates, cooled	5042-1385	96-well plates, 0.5 mL, polypropylene	120/pk
		5042-1386	96-well plates, 0.5 mL, polypropylene	10/pk
G1364-84531	Tray for 4 well plates, adjustable, cooled	5042-6454	96-deep well plates, 1 mL, polypropylene	50/pk
		5042-1389	Closing mats for 96-well plates, silicone, pre-slit, fits 96-well plates P/N 5042-1385 and 5042-1386 only	50/pk
G1364-84522	Tray for 2 well plates, 10 funnels, cooled	5042-1388	384-well plates, 90 µL, polypropylene	30/pk
		5065-4402	96-deep well collection plates with glass inserts, caps, and septa, pre-assembled, 0.35 mL	
G1367-60001	Tray for 2 well plates, 10 vials, 2 mL	5188-5321	Glass inserts, 350 µL	1000/pk
		5042-8502	96-well plates, 150 µL, conical, polypropylene	25/pk
		G2255-68700	Vial plate for 54 x 2 mL vials	6/pk
		5022-6538	Plate for 27 Eppendorf safe lock tubes, 0.5/1.5/2 mL	
		5022-6539	Vial plate for 15 x 6 mL vials	

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			





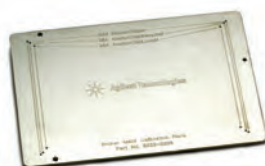
MALDI spotting adapter, G1364-83205



Well plate adapter assembly, G1364-60021



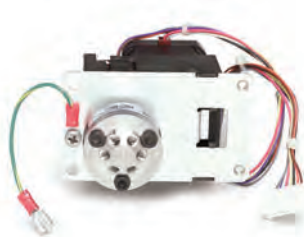
MALDI plate carrier Bruker, 5022-6541



Calibration plate Bruker, 5023-0208

G1364D Micro Fraction Collector Supplies

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
Fused silica/PEEK capillary, 25 µm, 50 cm	G1364-87304
Fused silica/PEEK capillary, 50 µm, 50 cm	G1364-87305
Fused silica/PEEK capillary, 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	5022-6541
MALDI plate carrier Bruker PAC	5022-6546
MALDI plate carrier ABI	5022-6542
MALDI plate carrier ABI Opti-TOF	5023-0238
MALDI plate carrier Agilent	5022-6543
MALDI plate carrier Micromass	5022-6544
Target plate for AP-MALDI LC/MS	G1972-60025
Calibration plate Bruker	5023-0208
Calibration plate ABI 192	5023-0209
Calibration plate ABI 10x10 & 20x20	5023-0213
Calibration plate Agilent	5023-0214
Calibration plate Micromass	5023-0215
On-line matrix kit for MALDI spotting	G1364-68706
Includes BCD board/cable, syringe, needles, adapters, connector and capillary	
Adapter, female to female 1/4-28	5042-8517
Adapter, male luer to female 1/4-28	5042-8518
Syringe, glass, 1 mL, 1/4-28 connector	5181-1541
Micro T-connector, PEEK, swept volume 29 nL, with 1/32 in. ID fittings	5042-8519
MALDI spotting tips, PTFE, 10/pk	G1364-81701



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			

Injection Valves

Injection Valves

Valve	Use With	Part No.	RheBuild Kit	Rotor Seal Material	Rotor Seal	Stator	Stator Face
2 position/6 port injection valve, 400 bar	G1313A, G1329A, G1367A/B, 1120	0101-0921	0101-1257	Vespel	0100-1853	0100-1850	0100-1851
				Tefzel	0100-1849		
				PEEK	0100-2231		
2 position/6 port micro injection valve, 400 bar	G1377A, G1389A	0101-1050		Vespel	0100-2088	0100-2089	
2 position/6 port injection valve, 600 bar	G1329B, G1367C SL, G1367D SL Plus, G1367E, 1220 Infinity LC	0101-1422		PEEK	0101-1416	0101-1417	
10 port, dual loop valve, 400 bar	G2258A	0101-1385		Vespel	0101-2415	0101-1390	
2 position/6 port MBB injection valve, 400 bar	G2260A	0101-1267	0101-1268	PEEK	0101-1268*	0100-2195	
2 position/6 port ultra high pressure valve, 1200 bar	G4226A	5067-4117		Vespel	5068-0007	5068-0006	

*Includes seal and stator face



2 position/6 port ultra high pressure valve,
5067-4117



2 position /6 port ultra high pressure valve,
5068-0006



Switching valve

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

External Switching Valve Replacement Parts

Description	Use With	RheBuild Kit	Rotor Seal Material	Rotor Seal	Stator
12 position/13 port preparative solvent selection valve	G1160A	0101-1288			0101-1365
6 position/14 port column selection valve (six column selector)	G1159A	0101-1290			0101-1364
2 position/10 port valve dual-sided MBB	G1157A	0101-1359 0101-1289			0101-1362
2 position/6 port switching valve	G1158A	0101-1358 (with PEEK rotor seal)	Vespel	0100-1855	0100-1850
			Tefzel	0100-1854	
			PEEK	0100-2233	
2 position/6 port switching valve, 600 bar	G1158B		HP PEEK blend	0101-1409	0101-1417
2 position/6 port micro switching valve	G1162A			0100-2087	0100-2089
2 position/10 port micro switching valve	G1163A			0101-1361	0101-1363
6 position/7 port selection valve	G1156A			0101-1361	0101-1410

Internal Switching Valves

Description	Use With	Complete Valve	Valve Head	Rotor Seal Material	Rotor Seal	Stator Face	Stator Head	Bearing Ring Isolation Seal	RheBuild Kit*
2 position/6 port, 400 bar	G1316A/B	0101-0920		Tefzel	0100-1854	0100-1851	0100-1850	0100-1852	0101-1258
				Vespel	0100-1855				
				PEEK	0100-2233				
2 position/6 port ultra high pressure, 1200 bar	G1316C		5067-4117		5068-0008		5068-0006	1535-4045	
2 position/6 port micro, 400 bar	G1316A/B	0101-1051			0100-2087	0100-2089			
2 position/6 port, 600 bar	G1316B	0101-1420	5067-4137		0101-1409		0101-1417		
2 position/10 port ultra high pressure, 1200 bar	G1316C		5067-4118		5068-0012		5068-0011	1535-4045	
2 position/10 port, 400 bar	G1316A/B	0101-1343		PEEK	0101-1361		0101-1362		0101-1360
2 position/10 port, 600 bar	G1316B	0101-1419	5067-4144		0101-1415		0101-1421		
8 position/9 port low pressure, 400 bar	G1316C		5067-4108		5067-4113		5067-4112	1535-4045	5067-4113
8 position/9 port high pressure, 600 bar	G1316C		5067-4107		5067-4111		5068-0001	0100-1852	
8 position/9 port ultra high pressure, 1200 bar	G1316C		5067-4121		5068-0002		5068-0001	1535-4045	

*Includes rotor and stator



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 or PEEK flow path
- Easy access to fittings due to wide 30° port angles

Series 7725i and 9725i Analytical Injection Valves

Stainless steel (SS) 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 in. (3.2 mm) and 1/16 in. (1.6 mm) OD tubing.
Note: 1/16 in. 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	Stator Face	RheBuild Kit
7125		N/A	Vespel	0101-0623		0101-0624	
			Tefzel	0101-0620			
			PEEK	0101-1255			
7725i, stainless steel	Analytical scale	5063-6502	Vespel	0101-0623	0100-1860	0100-1859	0101-1254
9725i, PEEK	Analytical scale	0101-1253	Tefzel	0101-0620			
3725i, stainless steel prep valve	Preparative scale	0101-1232	PEEK	0101-1233			
3725i, PEEK prep valve	Preparative scale	0101-1231	PEEK	0101-1233			
7010/7000/7040		N/A	PEEK	0101-1256			
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					
2 position/6 port manual injection valve for 1120	Does not include 20 μ L loop and needle port	5067-4104	PEEK	5067-4105	0100-1850		



7725i manual injection valve



Ring stand mounting bracket, 1400-3166

Manual Injection Valve Replacement Parts

- 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

Manual Injection Valve Replacement Parts

Description	Comments	Part No.
Isolation seal	For Rheodyne Series 7725, 9725, 3725	1535-4046
Ring stand mounting bracket		1400-3166
PEEK adapter, 1/8 in. to 1/16 in.	For 3725i	5067-1503
Position sensor switch for manual valves		0490-1849

Tips & Tools

Don't forget, we have special offers throughout the year.

To learn more, visit www.agilent.com/chem/specialoffers



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



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 $\pm 10\%$, 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 $\pm 21\%$, small loops $\pm 65\%$



Manual Injection Valve Sample Loops

Volume	ID (mm)	Material	Use With	Part No.
5 µL	0.18	SS	7125 and 7010	1535-4860
	0.18	SS	7725	0101-1248
	0.18	PEEK	9725	0101-1241
10 µL	0.30	SS	7125 and 7010	0101-0376
	0.30	SS	7725	0100-1923
	0.25	PEEK	9725	0101-1240
20 µL	0.51	SS	7125 and 7010	0101-0377
	0.30	SS	7725	0100-1922
	0.25	PEEK	9725	0101-1239
50 µL	0.51	SS	7125 and 7010	0101-0378
	0.51	SS	7725	0100-1924
	0.51	PEEK	9725	0101-1238
100 µL	0.51	SS	7125 and 7010	0101-0379
	0.51	SS	7725	0100-1921
	0.51	PEEK	9725	0101-1242
200 µL	0.76	SS	7125 and 7010	0101-1252
	0.76	SS	7725	0101-1247
	0.51	PEEK	9725	0101-1237
500 µL	0.76	SS	7125 and 7010	0101-1251
	0.76	SS	7725	0101-1246
	0.76	PEEK	9725	0101-1236
1 mL	0.76	SS	7125 and 7010	0101-1219
	0.76	SS	7725	0101-1245
	0.76	PEEK	9725	0101-1235
2 mL	1.00	SS	7125 and 7010	0101-1250
	1.00	SS	7725	0101-1244
	0.76	PEEK	9725	0101-1234
	1.6	PEEK	3725	0101-1229
5 mL	1.00	SS	7125 and 7010	0101-1249
	1.00	SS	7725	0101-1243
	0.76	PEEK	9725	0101-1230
	1.6	PEEK	3725	0101-1228
10 mL	2.0	PEEK	3725	0101-1227
20 mL	2.0	PEEK	3725	0101-1226



Syringes for Manual Injection

Agilent syringes for manual injection valves have a blunt-tip point style needle to prevent damaging the valve's internal parts. They can be used with any type/brand of manual injection valve.

LC Manual Syringes with Fitted Plungers

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

LC Manual Syringes with PTFE-Tipped Plungers

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



High temperature heat exchanger, G1316-80002



Heat exchanger/cooler, G1316-80004



Column Identification Module, 5062-8588

Thermostatted Column Compartment Supplies

Thermostatted Column Compartment Supplies

Description	Part No.
Capillary system for 0.12 mm ID use	G1316-68744
Rapid Resolution High Throughput capillary kit	5065-9947
1200 capillary kit for 0.12 mm ID	G1316-68716
High temperature heat exchanger, 1.6 μ L, 0.12 mm ID, "R"	G1316-80002
High temperature heat exchanger, 1.6 μ L, 0.12 mm ID, "L"	G1316-80003
Heat exchanger/cooler, 1.5 μ L, 0.12 mm ID	G1316-80004
Carrier for heat exchanger 1290 Infinity TCC and 1200 Series TCC SL	G1316-83200
Column Identification Module (CIM), 3/pk	5062-8588
Column clamp, 6/pk	5063-6526
Column holder for micro LC columns	5001-3702
Column connecting capillary with fittings, 7 cm, 0.12 mm ID, 1/16 in. male/male	G1316-87303
Column connecting capillary with fittings, 9 cm, 0.17 mm ID, 1/16 in. male/male	G1316-87300
Column connecting capillary with fittings, 18 cm, 0.12 mm ID, 1/16 in. male/male	G1313-87304
Column connecting capillary with fittings, 18 cm, 0.17 mm ID, 1/16 in. male/male	G1313-87305
PEEK tubing, 1/32 in. OD, 0.4 mm ID, 450 mm, Micro valve to waste	5022-6503

Capillary Tubing Kits

Capillary kits are available for easy ordering and setup of the switching valves. They include all capillaries and fittings for specific applications, as well as bulk PEEK capillaries and a capillary cutter to add maximum flexibility.

Capillary Tubing Kits

Application	Valve Kit	Part No.
Column regeneration Capillaries: 0.17 mm ID	G1157A	G1156-68711
Column regeneration Capillaries: 0.25 mm ID	G1157A	G1156-68713
Column regeneration Capillaries: 0.17 mm ID	G1316A #057	G1316-68711
Column selection Capillaries: 0.17 mm ID	G1159A	G1156-68712
Sample enrichment Capillaries: 0.17 mm ID	G1316A #055	G1316-68710
Sample enrichment Capillaries: 0.17 mm ID	G1158A	G1156-68714
Solvent selection Flow rate up to 10 mL/min	G1160A	G1160-68706 5067-4601*

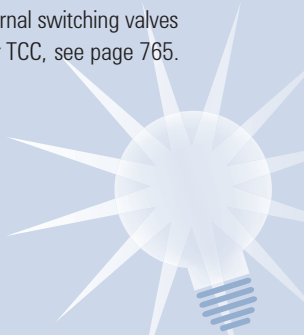
*Use for method development applications. Kit contains longer tubing.

Tips & Tools

To learn more about Agilent's complete portfolio of services, please visit www.agilent.com/chem/services



For internal switching valves
for your TCC, see page 765.



Capillary Kits for Column Selection

Description	Use With	Part No.
Capillary kit Contains capillaries (0.12 mm ID) and low dispersion heat exchangers	1290 Infinity TCC 2 pos/ 6 port QuickChange valve	5067-4646
Capillary kit Contains capillaries (0.12 mm ID) and low dispersion heat exchangers	1290 Infinity TCC 2 pos/ 10 port QuickChange valve	5067-4682
Capillary kit Contains capillaries (0.17 mm ID)	1290 Infinity TCC 2 pos/ 10 port QuickChange valve	5067-4730
Low dispersion capillary kit	1290 Infinity TCC 6 pos/ 14 port QuickChange valve	5067-4729
Method development capillary kit, low dispersion, short columns Contains capillaries (0.12 mm ID), fittings and low dispersion heat exchanger for up to 8 columns of up to 100 mm length	1290 Infinity TCC 8 pos/ 9 port QuickChange valve	5067-1595
Method development capillary kit, general purpose Contains capillaries (0.17 mm ID) and fittings for up to 6 columns of up to 250 mm length	1290 Infinity TCC 8 pos/ 9 port QuickChange valve	5067-1596
Method development capillary kit, low dispersion, long columns Contains capillaries (0.12 mm ID), fittings and low dispersion heat exchanger for up to 6 columns of up to 250 mm length	1290 Infinity TCC 8 pos/ 9 port QuickChange valve	5067-1597



Detector Supplies

Agilent wavelength detectors combine exceptional flexibility with superior instrument control, data communication, and analytical capabilities. This section shows you how to maintain your detector’s high level of selectivity and sensitivity.

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	Exchange the flow cell	Perform a wavelength calibration test after flow cell replacement
Drift exceeds application limit	Exchange the lamp	Perform a wavelength calibration test and a pressure tightness test after flow cell replacement
Leaky flow cell (For G4212 only)	Exchange the flow cell	Perform a wavelength calibration test after flow cell replacement
Leaky flow cell (For all G1314/G1315/G1365 detectors)	Clean or exchange the flow cell	Perform a wavelength calibration test and a pressure tightness test after flow cell replacement
Lower intensity (For G4212 only)	Exchange the flow cell	Perform a wavelength calibration test after flow cell replacement
Lower intensity (For all G1314/G1315/G1365 detectors)	Clean or exchange the flow cell	Perform a wavelength calibration test and a pressure tightness test after flow cell replacement



Deuterium lamp, 1100DAD/MWD longlife – C

Certified Lamps

- All lamps are tested for noise and drift specifications, correct operating voltage, light intensity and proper alignment
- Improved coating process increases Agilent lamp lifetimes up to 50%
- Agilent deuterium lamps are designed with a much narrower aperture providing increased light intensity and decreased noise – translating into an appreciably higher signal-to-noise ratio
- By providing higher sensitivity, Agilent lamps can extend detection capabilities and improve qualification at trace levels – for more than 2,000 hours of use

Agilent's lamps are manufactured in an ISO 9001 certified environment and are fully traceable throughout every step of the production process. Each lamp is then tested to ensure it meets Agilent's performance specifications. Test equipment is regularly calibrated using optical standards certified by NIST (National Institute of Standards and Technology) or PTB (Physikalisch-Technische Bundesanstalt).



Deuterium lamp, G1314-60100



Long life HiS Deuterium lamp, 5190-0917

Detector Lamps

Description	Comments	Part No.
Variable Wavelength Detector (VWD)		
Long life Deuterium lamp with RFID tag	For G1314D/E/F	G1314-60101
Long life Deuterium lamp	For G1314A/B/C, 1120 and 1220 Infinity LC	G1314-60100
Diode Array Detector (DAD)/Multiple Wavelength Detector (MWD)		
Long life HiS Deuterium lamp (8-pin) with RFID tag	For G4212A/B	5190-0917
Long life Deuterium lamp with RFID tag	For G1315C/D and G1365C/D	2140-0820
Long life Deuterium lamp	For G1315A/B and G1365A/B	2140-0813
Long life Deuterium lamp	For G1315A/B and G1365A/B	5181-1530
Deuterium lamp	For G1315A/B and G1365A/B	2140-0590
Tungsten lamp	For G1315A/B/C/D and G1365A/B/C/D	G1103-60001



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	Semi-micro 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 Cell and Repair Kits for VWD

Description	Use With	Specifications	Part No.	Repair Kit Part No.
Standard flow cell, RFID	G1314D/E/F	10 mm, 14 µL, 40 bar	G1314-60186	G1314-65061
Standard "D" type flow cell	G1314A/B/C	10 mm, 14 µL, 40 bar	G1314-60086	G1314-65061
Semi-micro flow cell, RFID	G1314D/E/F	6 mm, 5 µL, 40 bar	G1314-60183	G1315-68713
Semi-micro flow cell	G1314A/B/C	6 mm, 5 µL, 40 bar	G1314-60083	G1315-68713
Micro flow cell, 3 mm, RFID	G1314D/E/F	2 µL, 120 bar	G1314-60187	G1315-68713
Micro flow cell, 3 mm	G1314A/B/C	2 µL, 120 bar	G1314-60087	G1315-68713
Micro flow cell, 5 mm	G1314A/B/C	1 µL, 40 bar	G1314-60081	G1314-65052
High pressure flow cell, RFID	G1314D/E/F	10 mm, 14 µL, 400 bar	G1314-60182	G1314-65054
High pressure flow cell	G1314A/B/C	10 mm, 14 µL, 400 bar	G1314-60082	G1315-68713

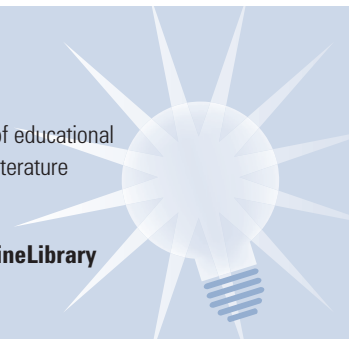
Capillaries for VWD Flow Cell

Flow Cell Description	Part No.	Inlet Capillary	Part No.	Outlet Capillary	Part No.
Standard flow cell, RFID	G1314-60186	Inlet capillary, 0.17 mm ID, 600 mm long	5062-8522	Waste capillary, PEEK, 0.25 mm ID	5062-8535
Standard "D" type flow cell	G1314-60086			1/16 in. finger-tight PEEK fitting, 2/pk	0100-1516
Semi-micro flow cell, RFID	G1314-60183	Inlet capillary, 0.12 mm ID, 400 mm long	5021-1823	Waste capillary, PEEK, 0.25 mm ID	5062-8535
Semi-micro flow cell	G1314-60083			1/16 in. finger-tight PEEK fitting, 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, 3 mm	G1314-60087				
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
High pressure flow cell	G1314-60082				

Tips & Tools

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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			High Pressure Flow Cell	
10	0.05	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		0.3-1 mm	2.1 mm	3.0 mm	4.6 mm	

Flow Cell and Repair Kits for DAD/MWD

Description	Use With	Specifications	Part No.	Repair Kit Part No.
Standard flow cell with RFID tag	G1315C/D, G1365C/D	10 mm, 13 µL, 120 bar	G1315-60022	G1315-68712
Standard flow cell	G1315A/B, G1365A/B	10 mm, 13 µL, 120 bar	G1315-60012	
Semi-micro flow cell, RFID	G1315C/D, G1365C/D	6 mm, 5 µL, 120 bar	G1315-60025	G1315-68713
Semi-micro flow cell	G1315A/B, G1365A/B	6 mm, 5 µL, 120 bar	G1315-60011	
Micro flow cell, RFID	G1315C/D, G1365C/D	3 mm, 2 µL, 120 bar	G1315-60024	G1315-68713
Micro high-pressure flow cell	G1315A/B, G1365A/B	6 mm, 1.7 µL, 400 bar	G1315-60015	
500 nL flow cell		10 mm, 50 bar	G1315-68724	
80 nL flow cell		6 mm, 50 bar	G1315-68716	
Preparative flow cell	G1315A/B, G1365A/B	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	
Max-light cartridge cell	G4212A/B Infinity LC DAD	10 mm, 1.0 µL, 60 bar	G4212-60008	
Max-light cartridge cell	G4212A/B Infinity LC DAD	60 mm, 4.0 µL, 60 bar	G4212-60007	
Max-light cartridge test cell	Must be used to perform detector build-in tests		G4212-60011	

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				
Semi-micro 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
Semi-micro flow cell	G1315-60011			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
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



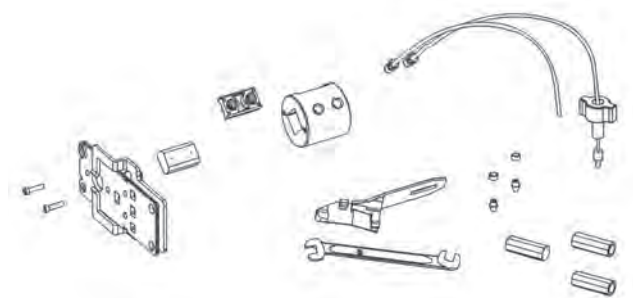
Max-light cartridge cell, G4212-60008

80 nL and 500 nL Flow Cell Supplies

Description	Unit	Part No.
Fitting screw	10/pk	5063-6593
Double winged nuts and 1/32 in. ferrules	10/pk	5065-4422
1/32 in. ferrule and stainless steel lock ring, lite touch	10/pk	5063-6592
Union adjustment tool	2/pk	5022-2146
Universal ZDV union, stainless steel, no fittings	2/pk	5022-2184
Torque wrench adapter		G1315-45003
Open end wrench, 4 mm		8710-1534

500 nL Flow Cell and Replacement Parts

Description	Comments	Part No.
500 nL flow cell	Contains quartz flow cell with 10 mm path length and 500 nL volume and connecting capillaries, max 50 bar pressure	G1315-68724
Sealing kit	Includes torque adapter, 2 cell seal assemblies, 5 lite touch front and back ferrules	G1315-68715
Quartz cell body, 10 mm		G1315-80001
Cell seal assembly, 500 nL		G1315-87101
Fused silica/PEEK capillary, 100 µm ID, 30 cm long	Inlet	G1315-87333
Fused silica/PEEK capillary, 50 µm ID, 40 cm long	Inlet	G1315-87323
Fused silica/PEEK capillary, 100 µm ID, 12 cm long	Outlet	G1315-87338
Fused silica/PEEK capillary, 50 µm ID, 12 cm long	Outlet	G1315-87328



500 nL flow cell and replacement parts

80 nL Flow Cell and Replacement Parts

Description	Comments	Part No.
80 nL flow cell	Contains quartz flow cell with 6 mm path length and 80 nL volume and connecting capillaries, max 50 bar pressure	G1315-68716
Sealing kit for 80 nL flow cell	Includes torque adapter, 2 cell seal assemblies, 5 lite touch front and back ferrules and 5 sleeves for 360 µm OD capillaries	G1315-68725
Quartz cell body, 80 nL, 6 mm path length		G1315-80002
Fused silica/PEEK capillary, 50 µm ID, 40 cm long	Inlet	G1315-87323
Fused silica/PEEK capillary, 50 µm ID, 12 cm long	Outlet	G1315-87328
Fused silica/PEEK capillary, 25 µm ID, 20 cm long	Inlet	G1315-87313
Fused silica/PEEK capillary, 25 µm ID, 60 cm long	Outlet	G1315-87318

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
PTFE tubing, 0.8 mm ID, 2 m	G1315-67301
PTFE tubing, 0.5 mm ID, 0.8 m	G1315-67302
Cell housing	G1315-27705
1/16 in. finger-tight PEEK fitting, 2/pk	0100-1516
Quartz body, 0.3 mm	G1315-80004
Quartz body, 0.06 mm	G1315-80003
Prep flow cell, stainless steel, 3 mm, 120 bar	G1315-60016
Stainless steel connecting capillary, 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	Includes 2 windows, 2 gaskets #1, 2 gaskets #2	G1314-65061
Semi-micro flow cell kit	Includes 2 windows, 4 gaskets: 2 standard #1, 1 semi-micro #1, 1 semi-micro #2	G1314-65056
Micro flow cell kit	Includes 2 windows, 2 gaskets #1, 2 gaskets #2	G1314-65052
Cell repair kit, semi-micro	Includes window screw kit, 4 mm hexagonal wrench and seal kits	G1315-68713
High-pressure flow cell kit	Includes 2 windows, 2 Kapton gaskets and 2 PEEK rings	G1314-65054
Diode Array Detector (DAD)/Multiple Wavelength Detector (MWD)		
Cell repair kit	Includes window screw kit, 4 mm hexagonal wrench and seal kit	G1315-68712
Cell repair kit, semi-micro	Includes window screw kit, 4 mm hexagonal wrench and seal kits	G1315-68713
Sealing kit for 500 nL flow cell	Includes torque adapter, 2 cell seal assemblies, 5 lite touch front and back ferrules	G1315-68715
Sealing kit for 80 nL flow cell	Includes torque adapter, 2 cell seal assemblies, 5 lite touch front and back ferrules and 5 sleeves for 360 µm OD capillaries	G1315-68725

Tips & Tools

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www.agilent.com/chem/education





1200 Series Evaporating Light Scattering Detector



Standard flow nebulizer, G4218-20000



Cartridge for gas regulator, G4218-40150

Other Detectors

G4218A 1200 Series Evaporating Light Scattering Detector Supplies

Description	Part No.
Standard flow nebulizer	G4218-20000
Semi-micro flow nebulizer	G4218-20001
Large flow nebulizer	G4218-20002
Micro flow nebulizer	G4218-20003
RRLC nebulizer	G4218-20004
Nebulization chamber, glass	G4218-40000
Black plastic nut, 13 mm diameter, glassware	G4218-40010
Black plastic nut, 22 mm diameter, glassware	G4218-40011
Black exhaust tube, 2.5 m	G4218-40110
Bulkhead	G4218-40130
Cartridge, 0.01 µm for gas regulator	G4218-40150
Pneumatic tube with stainless steel fitting	G4218-40220
Drain tube with stainless steel fitting	G4218-40100
Gas regulator with 0.01 µm filter and manometer	G4218-60100
Seal kit for nebulization chamber	G4218-68010
Caffeine standard, 250 µg/mL	G4218-85000

G1362A 1100/1200 Series Refractive Index Detector (RID) Supplies

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 in. ferrule, 1/3 in. nut, PTFE tubing	
Interface capillary, 400 mm, 0.17 mm ID	G1362-87300
Restriction capillary, 0.17 mm ID	G1362-87301



Flow cell for G1321A fluorescence detector,
G1321-60005



Stainless steel front ferrules, 5180-4108



Back ferrules 1/16 in., 5180-4114

G1321A 1100/1200 Series Fluorescence Detector (FLD) Supplies

Description	Part No.
Xenon flash detector lamp	2140-0600
Flow cell, 8 μ L, 20 bar	G1321-60005
Cuvette kit, 8 μ L, 20 bar	G1321-60007
Includes tubing, stainless steel fitting, front and back ferrule, PEEK fitting, syringe needle and syringe	
Cut-off filter kit:	
389, 408, 450, 500, 550 nm	5061-3327
380, 399, 418, 470, 520 nm	5061-3328
280, 295, 305, 335, 345 nm	5061-3329
Corrugated tubing, polypropylene, 6.5 mm ID, 5 m	5062-2463
PTFE tubing, FEP, 0.7 mm ID, 5 m	5062-2462
1/16 in. finger-tight PEEK fitting, 2/pk	0100-1516
Column connecting capillary with fittings, 380 x 0.17 mm	G1315-87311
1/16 in. stainless steel front ferrule, 10/pk	5180-4108
1/16 in. stainless steel back ferrule, 10/pk	5180-4114
1/16 in. stainless steel fitting, 10/pk	5061-3303
Fluorescence detector calibration sample, 1 g glycogen	5063-6597
Open end wrench, 1/4 and 5/16 in.	8710-0510
Glass syringe	9301-1446
Syringe needle	9301-0407

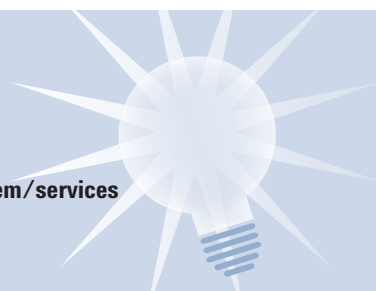
1100/1200 Series Chip LC Supplies

1100/1200 Series Chip LC Supplies

Description	Part No.
Rotor, inner valve, 3 grooves, chip LC	G4240-23705
Rotor, outer valve, 5 grooves, chip LC	G4240-25206
PEEK fitting, special for chip LC	G4240-43200
Fused silica/PEEK capillary, 15 µm, 90 cm	G4240-87300
Nano pump to chip cube	
Fused silica/PEEK capillary, 25 µm, 105 cm	G4240-87301
Micro well plate sampler to chip cube	
Fused silica/PEEK capillary, 100 µm, 100 cm	G4240-87302
Chip cube to waste	
Fused silica/PEEK capillary, 75 µm, 100 cm	G4240-87303
Syringe pump to chip cube	
Fused Silica/PEEK capillary, 50 µm, 50 cm	G4240-87304
Inline micro filter kit, 0.5 µm, PEEK	5067-1582
Use with chip cube LC system	
Fitting with 0.5 µm PEEK frit, 10/pk	5067-1584
PEEK fitting for use with 1/32 in. OD, 10/pk	5067-1585
PEEK sample transfer capillary, 25 µm, 100 cm	G4240-87309
Micro inline filter to chip cube (Phospho-Chip application)	
PEEK capillary, 25 µm, 10 cm	G4240-87310
Micro well plate sampler to micro inline filter (Phospho-Chip application)	

Tips & Tools

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LC/MS Supplies

Combined with Agilent's industry-leading LC systems, our single quadrupole, ion trap, triple quadrupole, TOF and Q-TOF LC/MS solutions combine world-class performance with legendary reliability and ease-of-use.

This section contains all of the mass spectrometry supplies you need to keep your LC mass spectrometer running at peak performance.

LC/MS Maintenance Schedule

Procedure	When to Perform
Flush the nebulizer	Daily or at the end of each shift to flush traces of samples and buffers out of the tubing, valves, and nebulizer.
Clean the electrospray spray chamber	Daily or anytime you suspect carryover contamination from one sample or analysis to another.
Replace the electrospray nebulizer needle	When the needle is plugged. Common symptoms of a plugged needle are increased LC back pressure, off-axis spraying, or dripping from the nebulizer.
Clean the APCI spray chamber	Daily or anytime you suspect carryover contamination from one sample or analysis to another.
Replace the APCI nebulizer needle	When the needle is plugged. Common symptoms of a plugged needle are increased LC back pressure or off-axis spray from the nebulizer.
Clean the multimode source	Daily or anytime you suspect carryover contamination from one sample or analysis to another, or when you must access the end cap and capillary cap for cleaning and inspection.
Check calibrant levels	Monthly or weekly if you tune the LC/MS frequently.





LC/MS Preventive Maintenance Kit

For your convenience, the LC/MS Preventive Maintenance Kit has the recommended common supplies needed for most Agilent LC/MS systems. Unique source parts should be ordered separately.

LC/MS Preventive Maintenance kit

Description	Part No.
LC/MS Preventive Maintenance kit	5190-1443
Foreline pump oil, Inland 45, 1 L, for E1M18/E2M28	6040-0834
Oil mist filter element for E1M18/E2M28	1535-4970
Filter element, 5 µm, 5/pk	0100-2051
Spring, canted coil, 4/pk	1460-2571
Big hydrocarbon trap, 1/4 in. fittings	BHT-4
Rotor seal, Vespel, pH 0 to 10	0100-1855

Tips & Tools

Save ordering time and money with the LC/MS PM Kit!
It contains the common supplies specified in Agilent service engineer preventive maintenance procedure for LC/MS platforms.



LC/MS Supplies

Description	6100 Series Single Quadrupole LC/MS	6200 Series TOF LC/MS	6300 Series Ion Trap LC/MS	6400 Series Triple Quadrupole LC/MS	6500 Series Accurate- Mass Q-TOF LC/MS	Part No.
ES nebulizer assembly, original	◆	◆	◆	◆	◆	G1946-60098
ES nebulizer needle (original) replacement kit	◆	◆	◆	◆	◆	G2427A
ES nebulizer assembly, new	◆	◆	◆	◆	◆	G1958-60098
ES nebulizer needle (new) replacement kit	◆	◆	◆	◆	◆	G1958-60136
APCI nebulizer assembly	◆	◆	◆	◆	◆	G1946-60037
APCI nebulizer needle replacement kit	◆	◆	◆	◆	◆	G2428A
Needle assembly APCI/Multimode	◆	◆	◆		◆	G1947-60103
Corona needle APCI/Multimode	◆	◆	◆	◆	◆	G1947-20029
Capillary cap, high temperature, 3.0 mm	◆	◆	◆	◆	◆	G1946-20301
Capillary, 0.5 mm ID, dielectric*	◆		◆			G1946-80009
Capillary, 0.6 mm ID, dielectric*	◆	◆	◆	◆	◆	59987-20040
Capillary, 0.6 mm ID, resistive, fast polarity switching*				◆		G1960-80060
Spring, canted coil, 0.25 in. ID, 0.53 mm	◆	◆	◆	◆	◆	1460-2571
1/6 in. tee, low dead volume, stainless steel		◆			◆	0100-0969

*Dielectric capillary supports standard polarity switching only. Resistive capillary supports fast polarity switching

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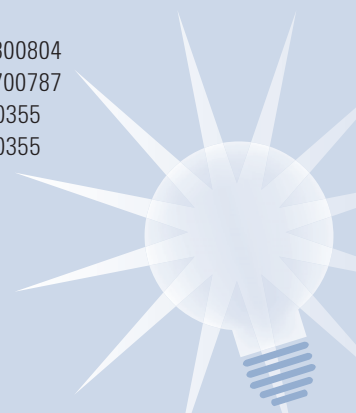


Corona needle APCI, G1947-20029

Tips & Tools

ES nebulizer (original) is compatible with the following ion sources:

- ESI G1948A with Serial Number < US91801994
- ESI G1948B with Serial Number < US91201787
- Multimode G1978A with Serial Number < US90800804
- Multimode G1978B with Serial Number < US90700787
- Dual ESI G3251A with Serial Number < US91200355
- Dual ESI G3251B with Serial Number < US91200355



LC/MS Supplies

Description	6100 Series Single Quadrupole LC/MS	6200 Series TOF LC/MS	6300 Series Ion Trap LC/MS	6400 Series Triple Quadrupole LC/MS	6500 Series Accurate- Mass Q-TOF LC/MS	Part No.
Syringe adapter			◆			9301-1291
Syringe pump			◆			3162-0178
1/16 in. finger-tight PEEK fitting		◆	◆		◆	0100-1516
Female luer to female 10/32 adapter		◆	◆		◆	0100-2304
PEEK tubing		◆	◆		◆	0890-1915
Gas-tight syringe, PTFE luer lock		◆	◆		◆	5182-9710
High-throughput skimmer, 2 mm		◆		◆	◆	G1969-20302
Skimmer 1 (G1956A/B)	◆					G1956-20302
HED assembly	◆					G1946-80019
HED assembly (G6140A, G6460A, G6530A)				◆		G2571-80103
HED assembly		◆				G1956-80000
Electron multiplier replacement horn	◆	◆		◆		05971-80103
Replacement horn and dynode	◆		◆	◆		G2441-80010

*Dielectric capillary supports standard polarity switching only. Resistive capillary supports fast polarity switching



05971-80103



LC/MS Foreline Pump Supplies

Description	Part No.
Oil mist filter kit for E1M18/E2M28	3162-1056
Oil mist cartridge filter for MS40+	G1960-80039
Oil return kit	3162-1057
Foreline pump oil, Inland 45, 1 L, for E1M18/E2M28	6040-0834
Rotary pump oil, 4 L, for E1M18/E2M28	6040-0798
Foreline exhaust adapter	59980-20134
Hose clamp	1400-0563
Oil mist filter element for E1M18/E2M28	1535-4970
KF25 clamp, stainless steel	0100-0549
KF25 coseal (inside clamp)	0100-1597
Exhaust tubing	0890-1727
Pump oil drip pan	G1946-00034

LC/MS Chemicals

Description	6100 Series Single Quadrupole LC/MS	6200 Series TOF LC/MS	6300 Series Ion Trap LC/MS	6400 Series Triple Quadrupole LC/MS	6500 Series Accurate- Mass Q-TOF LC/MS	Part No.
ES/APCI positive ion performance standard, 5 x 1 mL ampoules	◆	◆		◆	◆	G2423A
Electrospray LC demo sample (Sulfamix)	◆			◆*		59987-20033
ESI+APCI LC demo sample	◆					G1978-85000
ES negative ion performance standard, 5 x 1 mL ampoules	◆			◆		G2424A
APCI negative ion performance standard, 5 x 1 mL ampoules	◆					G2425A
ES/APCI positive ion performance standard	◆					G1946-85004
Multiple-charge compound performance evaluation sample (horse heart myoglobin)	◆					G2426A
Caffeine standards kit for LC/MS OQ/PV	◆					8500-6917
ES/APCI positive ion performance standard, 5 x 1 mL ampoules	◆					G2423A
ES-TOF reference mix, 6 x 2 mL ampoules		◆			◆	G1969-85001
ES-TOF biopolymer reference standard kit		◆				G1969-85003
Flushing solvent	◆	◆	◆	◆	◆	G1969-85026
High purity water, 4 L	◆	◆	◆	◆	◆	8500-2236
Methyl alcohol, 1 L	◆	◆	◆	◆	◆	8500-1867
Ammonium formate	◆	◆	◆	◆	◆	G1946-85021
Formic acid, 5 mL	◆	◆	◆	◆	◆	G2453-85060
Acetonitrile, 1 L	◆	◆	◆	◆	◆	G2453-85050

*Recommended item for familiarization

LC/MS Common Supplies*

Description	Part No.
Common Parts	
Filter element, 5 µm, 5/pk	0100-2051
Rotor seal, Tefzel, pH 0 to 14	0100-1854
Rotor seal, Vespel, pH 0 to 10	0100-1855
Inlet filter assembly	G1946-60180
SSV long drain tubing assembly	G1969-60086
Spring, canted coil	1460-2571
Cleaning Supplies	
Abrasive mesh, 4000 grit	8660-0827
Capillary cleaning wire for dip tube	G1946-80054
Cleaning powder, dielectric capillary, Alconox	5190-1401
Cloths, lint-free	05980-60051
Cotton swabs, 100/pk	5080-5400
Gas Purifiers	
Big hydrocarbon trap, 1/4 in. fittings	BHT-4
Big moisture trap, 1/4 in. fittings	BMT-4
Big universal trap, 1/4 in. fittings	RMSN-4
Big universal trap, 1/8 in. fittings, Nitrogen	RMSN-2
Tools	
LC/MS tool kit	G1946-60157
Nebulizer adjustment fixture	G1946-20215
Nebulizer 25X magnifier	G1946-80049
Plastic tubing cutter	8710-1930
Screwdriver, Torx T15	8710-1622
Screwdriver, Torx T20	8710-1615
Open end wrench, 1/4 and 5/16 in.	8710-0510
Wrench, 1/2 and 7/16 in.	8710-0806
Needle nose pliers, pointed serrated jaws	8710-0004
3 mm wrench for nebulizer needle adjustment	8710-2699

*These parts are common to all LC/MS systems

Tips & Tools

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Quiet Cover

Quiet Cover

Agilent has a solution to the frequent maintenance and inherent noise of LC/MS rough pumps. The Quiet Cover II was designed for easy movement, maintenance, and better living with rough pumps used with Agilent and other LC/MS systems.

- Locking castors to move heavy pump for maintenance
- No tools necessary to remove sectioned cover for easy access to pump
- Built in lift-and-tilt lever raises end of pump to drain oil
- Removable drip pan with well and hand holds to collect and transport oil
- Sound absorbing cabinet with resistant foam insulation to reduce pump noise
- Pump mounted on cushioned grommets to minimize vibration
- 2 Integrated fans maintain temperature inside cover
- LEDs and audible alarm if temperature exceeds 35°C limit
- Maximum ambient temperature of 35°C when airflow is neither restricted nor recycled
- Standard one-year warranty; installation and familiarization included with new LC/MS orders

The Quiet Cover II is compatible with these Agilent LC/MS Systems that use Edwards pumps:

- 6300 Traps: G2440DA, G2451AA, G4533AA, G2474SS
- 6410 QQQ: G6410AA
- 6210 TOF: G3250AA, G3252A
- 6510AA Q-TOF: G6510AA
- Any analytical system using BOC Edwards pumps (lbs/kg): E2M28, E2M18, E1M18

Please confirm rough pump used in your Agilent LC/MS system to ensure compatibility.

Quiet Cover II for Agilent LC/MS Systems

Description	Part No.
Quiet Cover II for Agilent LC/MS Systems 12.5 W x 17.3 H x 33.5 L	G3199B

LC/MS Standards Kits

LC/MS Standards Kits

Description	Part No.
Caffeine standards kit for LC/MS OQ/PV Includes 5 ampoules, 5 mL each: 0.5, 1.0, 5.0, 25.0, and 50.0 µg/mL in water	8500-6917
Caffeine standards kit for LC/MS-Trap OQ/PV Includes 5 ampoules, 5 mL each: 0.1, 0.5, 1.0, 5.0, 10.0, µg/mL caffeine in water	5065-9908
Sulfa drug standards kit for LC/MS OQ/PV 5 x 2 mL ampoules with 4 sulfa drugs in water/methanol 70:30	5188-6523

LC/MS Analyzer Kit Standards

Description	Part No.
LC/MS toxicology calibration mixture, 3 x 1 mL ampoules	5190-0470
Method EN12916/IP391 LC standard calibration kit, 4 x 1 mL ampoules	5190-0484
Method EN12916/IP391 system calibration standard kit, 2 x 1 mL ampoules	5190-0485
LC TOF/QTOF/QQQ pesticide test mixture, 2 solutions, 3 x 1 mL ampoules of each	5190-0469

LC/MS Calibrant Mixes

Description	Part No.
ESI tuning mix, 100 mL	G2421A
APCI/APPI calibrant solution, 100 mL	G2432A
ESI tuning mix for ion trap, 100 mL	G2431A
ES-TOF tuning mix, 100 mL	G1969-85000
APCI-L low concentration tuning mix, 100 mL	G1969-85010
MMI-L low concentration tuning mix, 100 mL	G1969-85020

Tips & Tools

Agilent offers a variety of e-Seminars and on-site training to help you learn how to be a more effective chromatographer.

For more information, visit www.agilent.com/chem/education



LC/MS Calibrant Mix and Source Compatibility Matrix

Source	6100 Series Single Quadrupole LC/MS*	6140A/6150B Single Quadrupole LC/MS	6200 Series TOF LC/MS	6300 Series Ion Trap LC/MS	6400 Series Triple Quadrupole LC/MS	6500 Series Accurate-Mass Q-TOF LC/MS
ESI	G2421A	G1969-85000	G1969-85000	G2431A	G1969-85000	G1969-85000
APCI	G2432A	G1969-85010	G1969-85010	G2432A	G1969-85010 ²	G1969-85010 ²
APPI	G2432A	G2432A	G1969-85010	G2432A	G2432A ²	G1969-85010 ²
MMI	G2432A	G1969-85000	G1969-85020	G2432A	G1969-85020	G1969-85020
NanoESI			G1969-85000 ⁴	G2431A		G1969-85000 ⁴
HPLC chip cube		G1969-85000 ²	G1969-85000 ⁴	G2431A ¹	G1969-85000 ³	G1969-85000 ⁴

*G6110A, G6120A/B, G6130A/B

¹5X dilution suggested²No autotune³ESI positive tune only⁴Calibration only