

Manual HPLC Syringes

HPLC syringes are specifically designed for manual or automatic injection into high pressure ports. The needle is blunt and electro-polished to slide smoothly into the injection port, reducing the wear on critical seals. The selection of the appropriate syringe for HPLC applications takes the following three aspects into account: the type of injection valve, the sample properties,

and the injection volume. The volume of the syringe should be selected based on the volume and type of injection. In partial loop filling, the injection volume should not be greater than half of the loop capacity. In complete loop filling, where the loop size sets the injection volume, the syringe capacity should be greater than twice the loop volume.

Rheodyne, Valco, Beckman, and SSI Valves

2.5 μ L to 1 mL



P. 31

Constant Rate Syringes

20 μ L to 200 μ L



P. 31

Valco VISF-1 Injection Valves

25 μ L to 10 mL



P. 32

Waters Manual Syringes

10 μ L to 250 μ L



P. 32



Rheodyne, Valco, Beckman, and SSI Valves

Syringes for Rheodyne, Valco, Beckman, and SSI Valves. These syringes are available in Cemented Needle (N), Luer Tip Cemented Needle (LTN), and Removable Needle (RN) terminations. For more details on the terminations see page 12. The needles in this section are 51 mm in length and are point style 3.

Removable Needle (RN)



P/N	Volume	Series	Gauge
87942	2.5 µL	600	22s ga
87943	5 µL	600	22s ga
80065	10 µL	1700	22s ga
80265	25 µL	1700	22s ga
80965	50 µL	1700	22s ga
81065	100 µL	1700	22s ga
81165	250 µL	1700	22 ga
81265	500 µL	1700	22 ga
81365	1 mL	1000	22 ga

Cemented Needle (N)



P/N	Volume	Series	Gauge
80365	10 µL	700	22s ga
80465	25 µL	700	22s ga
80275	25 µL	1700	22s ga
80565	50 µL	700	22s ga
80975	50 µL	1700	22s ga
80985	50 µL	1700	22 ga
80665	100 µL	700	22s ga
81075	100 µL	1700	22s ga
81085	100 µL	1700	22 ga
80765	250 µL	700	22 ga
80865	500 µL	700	22 ga

Luer Tip Cemented Needle (LTN)



P/N	Volume	Series	Gauge
81175	250 µL	1700	22s ga
81185	250 µL	1700	22 ga
81216	500 µL	1700	22 ga

Constant Rate Syringes

The CR700 Constant Rate Syringes have preset volumes that can be dispensed at a constant flow rate. The volume is adjustable with a precisely adjustable micrometer screw. The adjusted volume can be fixed with a locking ring. Reproducible injection speed is obtained by means of a spring. The sample is delivered by pressing the push button. Constant Rate Syringe needles are 51 mm in length and point style 3.



P/N	Volume	Series	Gauge
84301	20 µL	1700	22s ga
84303	50 µL	1700	22 ga
84302	200 µL	1700	22 ga



Valco VISF-1 Injection Valves

Syringes for Valco VISF-1 Injection Valves. These syringes have the Removable Needle (RN) termination. For more details on the terminations see page 12. The needles in this section are 19 mm in length and are point style 3.



P/N	Volume	Series	Gauge	Replacement Needles
80231	25 µL	1700	22s ga	7787-01
80931	50 µL	1700	22s ga	7787-01
81031	100 µL	1700	22s ga	7787-01
81131	250 µL	1700	22s ga	7806-02
81231	500 µL	1700	22 ga	7787-02
81331	1 mL	1000	22 ga	7787-02
81431	2.5 mL	1000	22 ga	7787-02
81531	5 mL	1000	22 ga	7787-02
81631	10 mL	1000	22 ga	7787-02

Waters Manual Syringes

Gastight and Microliter series syringes come with a 25s gauge, 50 mm removable needle to work with the Waters U6K HPLC valve.



P/N	Volume	Series	Gauge	Replacement Needles
84815	10 µL	800	25s ga	8647-01
84816	25 µL	800	25s ga	8647-01
80238	25 µL	1700	25s ga	8647-01
84980	25 µL	1800	25s ga	8647-01
84817	50 µL	800	25s ga	8647-01
80938	50 µL	1700	25s ga	8647-01
84983	50 µL	1800	25s ga	8647-01
84818	100 µL	800	25s ga	8647-01
81038	100 µL	1700	25s ga	8647-01
84986	100 µL	1800	25s ga	8647-01
84819	250 µL	800	25s ga	8648-01
81138	250 µL	1700	25s ga	8648-01
84989	250 µL	1800	25s ga	8648-01

Part number 84891 is a kit that consists of a 10, 25, 50, 100, and 250 µL 800 series barrel/plunger assemblies, holder assembly, six-pack (25s/50 mm/3) small hub needles, and six-pack (25s/50 mm/3) large hub needles.

Part number 81610 is a 10 mL TLL syringe used for priming Waters syringes which can be used with 90149 Kel-F Hub Needles or 90049 Metal Hub Needles.



Point Styles

Point 2  Point 3  Point 4  Point 5  Point AS 



HPLC Autosampler Syringes

HPLC autosamplers enable the automatic introduction of samples into the sample loop as well as some sample preparation. Automatic injection has become very common, as it provides improved reproducibility and speed. Hamilton offers a wide range of HPLC autosampler syringes.

The features of the autosampler syringes are adapted for an exact fit to a specific autosampler.

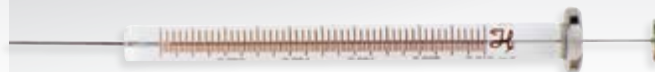
Manufacturer	Model	For Syringes, See Model:	Page
Agilent	1290 Infinity LC Injector ProStar 410/420/430	PAL LC HTC, HTS Syringes Spark Holland Syringes	P. 34 P. 37
Antec	AS 100/110	Spark Holland Syringes	P. 37
Beckman Coulter	508	Spark Holland Syringes	P. 37
CTC/LEAP	A200S PAL LC HTC, HTS Syringes		P. 34 P. 34
Dionex	ASI-100 ESA Model 540/540 MT/542 Ultimate 3000	Spark Holland Syringes PAL LC HTC, HTS Syringes	P. 35 P. 37 P. 34
Grace Alltech	Model 580	Spark Holland Syringes	P. 37
Hitachi LaChrom	L-2200, 7200, 7250, 8800, 8900, AS 1000, 2000		P. 35
Kontron	360, 460, 465		P. 36
Perkin Elmer	Flexar FX-10, FX-15, Series 225 Series 220	Spark Holland Syringes	P. 37 P. 36
Shimadzu	SIL-6A SIL-10AF, SIL-10AP		P. 36 P. 36
Spark Holland	Midas, Triathlon, Endurance, Alias		P. 37
Thermo Finnigan	AS 100/300, AS 1000/3000/3500 SP 8780, SP 8875, SP 8880		P. 37 P. 38
Varian	ProStar 410/420/430 9100	Spark Holland Syringes	P. 37 P. 38
Waters	717 PLUS, WISP 2707 2777	Spark Holland Syringes PAL LC HTC, HTS Syringes	P. 38 P. 37 P. 34



CTC LEAP Syringes

A200S

Cemented Needle Syringes



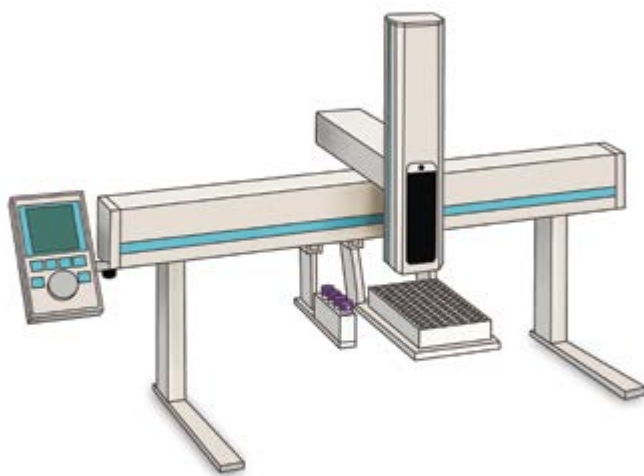
P/N	Volume	Gauge	Length	Point
203560	10 µL	22s ga	51 mm	3
203566	100 µL	22s ga	51 mm	3

CTC PAL Syringes

PAL LC HTC, HTS

CTC PAL® autosamplers are one of the most popular sample injection systems for HPLC analyses. Customers rely on its ability to sample from many different vial and well types and on its ultimate platform flexibility. The syringe is at the heart of every injection that the LC PAL® system performs, and CTC chose Hamilton to provide this critical component.

This section has syringes for PAL LC instruments. This section also includes syringes for Agilent, Dionex, and Waters as these instruments are a private label for CTC.



S-Line Syringes

S-Line syringes are the cost-effective choice for CTC PAL autosampler applications. It incorporates a precision-machined PTFE plunger tip which creates a leak-free seal. With the tight fit in the glass barrel, the tip wipes the interior of the syringe barrel free of sample, minimizing sample carryover.

C-Line Syringes

C-Line syringes incorporate several unique design features that ensure superior performance. The unique flange alignment design aids in installation and results in fewer bent needles while the plunger button can be adjusted to prevent plunger tip damage. An innovative direct attachment design of the needle to the barrel minimizes sample carryover.

X-Type Syringes

X-Type syringes have a near zero carryover and a long-lasting plunger tip to meet the requirements of sensitive, high-throughput life science applications. The syringe glass barrel is polished and coated for chemical inertness and enhanced lifetime. The needle is deactivated and coated to reduce sample adsorption.

S-Line Syringes



P/N	Volume	Barrel (O.D.)	Gauge	Point
67444-01	10 µL	6.6 mm	22s ga	3
67446-01	25 µL	7.9 mm	22s ga	3
67450-01	50 µL	6.6 mm	22 ga	3
67452-01	100 µL	6.6 mm	22s ga	3
67442-01	250 µL	7.9 mm	22 ga	3
67448-01	500 µL	7.9 mm	22 ga	3



CTC PAL Syringes (Cont.)

C-Line Syringes



P/N	Volume	Barrel (O.D.)	Gauge	Point
203073*	10 µL	6.6 mm	22s ga	3
203194	10 µL	6.6 mm	22s ga	3
203274	25 µL	6.6 mm	22s ga	3
203075	25 µL	7.9 mm	22s ga	3
203077	100 µL	6.6 mm	22s ga	3
203235	100 µL	6.6 mm	22 ga	3
203079	250 µL	7.9 mm	22 ga	3
203349	500 µL	7.9 mm	22 ga	3
203081**	1 mL	7.6 mm	22 ga	3
203083**	2.5 mL	9.65 mm	22 ga	3
203085**	5 mL	13.6 mm	22 ga	3

*This syringe is a Microliter Syringe.

**These syringes are a Luer Tip Cemented Needle (LTN) termination.

X-Type Syringes



P/N	Volume	Barrel (O.D.)	Gauge	Point
204475	25 µL	7.9 mm	22s ga	3
204379	50 µL	7.9 mm	22s ga	3
204452	100 µL	6.6 mm	22s ga	3
204400	100 µL	6.6 mm	22 ga	3
202668*	100 µL	6.6 mm		

* This part number is a Removable Needle (RN) termination.

Dionex Gina Syringes

ASI-100



Removable Needle (RN)



P/N	Volume
7654-01 (no needle included)	25 µL
7657-01 (no needle included)	250 µL

Hitachi LaChrom Syringes

L-2200, L-7200,
L-7250, L-8800,
L-8900, AS1000,
AS2000



Special Termination



P/N	Volume
0160310	500 µL



Point Styles

Point 2 Point 3 Point 4 Point 5 Point AS



Kontron HPLC Syringes

360, 460, 465



Accudil (AD)



P/N	Volume
201050	100 µL

Perkin Elmer Syringes

SERIES 220



ChemSeal (C)



P/N	Volume
80962	50 µL
81062	100 µL
81162	250 µL
81262	500 µL
81360	1 mL
81460	2.5 mL

Shimadzu Syringes

SIL-6A



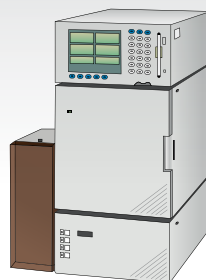
Removable Needle (RN)



P/N	Volume
7656-01 (no needle included)	100 µL

Shimadzu Syringes

SIL-10AF,
SIL-10AP



ChemSeal (C)



P/N	Volume
81260	500 µL
81460	2.5 mL



Spark Holland Syringes

This section has syringes for Spark Holland instruments. This section also includes syringes for Agilent, Antec, Beckman, Dionex, Grace Alltech, Perkin Elmer, Varian, and Waters as these instruments are a private label for Spark Holland.

ChemSeal (C)



P/N	Volume
62161-01	25 μ L
54658-01	100 μ L
54659-01	250 μ L
54660-01	500 μ L
54661-01	1 mL
54662-01	2.5 mL



Midas



Triathlon



Alias



Endurance

Thermo Finnigan Syringes

AS100/300,
AS1000/3000/3500



ChemSeal (C)



P/N	Volume
81162	250 μ L
81262	500 μ L
81360	1 mL
81460	2.5 mL



Thermo Finnigan Syringes

SP 8780, SP 8875,
SP 8880



ChemSeal (C)



P/N	Volume
202192	500 μ L
81460	2.5 mL

Varian Syringes

9100



ChemSeal (C)



P/N	Volume
0159902	100 μ L

Waters Syringes

717 PLUS, WISP



ChemSeal (C)



P/N	Volume
80020	25 μ L
80024	250 μ L

