Teknokroma®

Professionally Friendly

Hamilton™ Syringes

The Measure of Excellence

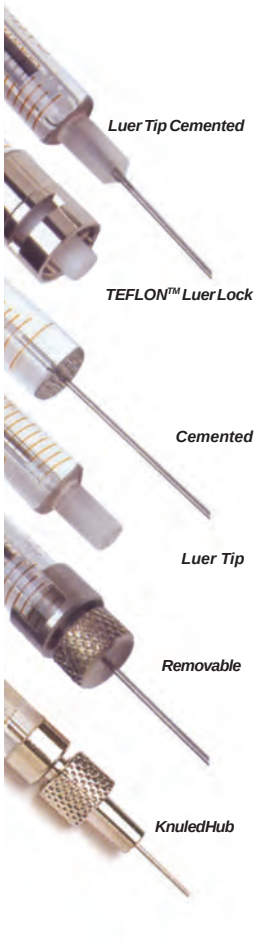
Highest quality materials

From our pioneering efforts in designing and producing the first precision MICROLITER™ syringe, we have crafted our products from the finest materials and have controlled them with the same meticulous care and attention to detail that have become the hallmark of Hamilton products.

Unsurpassed Accurancy and Precision

Every one of our syringes is subjected to extensive quality control procedures and tested to make sure we meet the high expectations of accuracy and precision that you have come to expect from all Hamilton products.

The design of our barrel and plunger dimensions assures high levels of accuracy and precision. Hamilton syringes are manufactured to be accurate within +/- 1% of nominal volume. The Hamilton Quality System is EN ISO 9001 / EN 46001 certified.



Syringe Termination

• **Luer Tip Cemented** - ground glass tip with a cemented needle: not recommended for use with halogenated solvents, such as $MeCL_2$

• **TEFLON™ LuerLock** - can be used with luer (Metal of Kel-F®) hub needles, TEFLON® tubing assemblies and connectors can be used, offer flexibility.

• **Cemented** - not recommended for use with halogenated solvents, such as $MeCL_2$

• **Luer Tip** - ground glass tip can be used with most hypodermic needles: Kel-F® hub needles, TEFLON® tubing assemblies and connectors can also be used; offers flexibility

• **Removable** - advantageous for laboratories with multiple users; economical since you can replace the needle without having to purchase a new syringe

• **Knurled Hub** - Replaceable needles; use only with the 7000 Series syringes.

Needle Point Style

• **Point Style AS (1)** - special conical style needle point designed to withstand the demands of multiple injections; exclusively used on autosampler syringes.

• **Point Style 2** - 10 - 12º bevelled non-coring needle point recommended for septum penetration; only needle gauges 26s - 22 are recommended for optimum septum penetration.

• **Point Style 3** - blunt needle point for use with HPLC injection valves and for sample pipetting

• **Point Style 4** - 10 - 12º bevelled needle point recommended for life science applications; especial point styles such as 12º, and 45º are available on request.

• **Point Style 5** - conical needle with side port of penetration of septa, thin-gauged vinyls and plastics without corning; minimizes septum damage.

700 Series MICROLITER™ Syringes

5 µL - 500 µL

- For use with liquids
- Cemented needles (N), removable needles (RN), or luer tip (LT)
- Plungers and syringe barrels are not interchangeable or replaceable
- Tight tolerances between the plumger and the barrel

Hamilton 700 Series Microliter™ Syringes

N (Cemented Needle)

RN (Removable Needle)

LT (Cemented Needle)

Cat.No	Model/Needle Term.	Volume	Needle Lenght	Needle Gauge	Point Style
HA-87900	75 N	5 µL	51 mm	26s	2
HA-80300	701 N	10 µL	51 mm	26s	2
HA-80400	702 N	25 µL	51 mm	22s	2
HA-80500	705 N	50 µL	51 mm	22s	2
HA-80600	710 N	100 µL	51 mm	22s	2
HA-80700	725 N	250 µL	51 mm	22s	2
HA-80800	750 N	500 µL	51 mm	22	2
HA-87930	75 RN	5 µL	51 mm	26s	2
HA-80330	701 RN	10 µL	51 mm	26s	2
HA-80430	702 RN	25 µL	51 mm	22s	2
HA-80530	705 RN	50 µL	51 mm	22s	2
HA-80630	710 RN	100 µL	51 mm	22s	2
HA-80730	725 RN	250 µL	51 mm	22s	2
HA-80830	750 RN	500 µL	51 mm	22	2
HA-80301	701 LT	10 µL	-	26s	-
HA-80401	702 LT	25 µL	-	22s	-
HA-80501	705 LT	50 µL	-	22s	-
HA-80601	710 LT	100 µL	-	22s	-
HA-80701	725 LT	250 µL	-	22s	-
HA-80801	750 LT	500 µL	-	22	-

Hamilton Syringes Six pack

Cat.No	Model/Needle Term.	Volume	Needle Lenght	Needle Gauge	Point Style
HA-80366	701 N, pk/6	10 µL	51 mm	26s	2
HA-80336	701 RN, pk/6	10 µL	51 mm	26s	2

600 Series MICROLITER™ Syringes

2.5 µL- 5 µL

- For use with liquids
- Removable needles (RN)
- Reinforced plungers
- Plungers and syringe barrels are not interchangeable or replaceable

RN (Removable Needle)

Hamilton 600 Series Microliter™ Syringes

Cat.No	Model/Needle Term.	Volume	Needle Lenght	Needle Gauge	Point Style
HA-87942	62 RN	2.5 µL	51 mm	22s	3
HA-87943	65 RN	5 µL	51 mm	22s	3

Hamilton™ Syringes

800 Series MICROLITER™ Syringes

5 µL - 250 µL

- For use with liquids
- Removable needles (RN) or Cemented needles (N)
- Reinforced plungers
- Barrel/plunger assemblies are replaceable
- Plunger stop prevents plunger blowout

N (Cemented Needle)

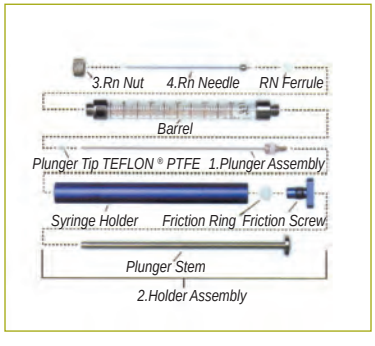
RN (Removable Needle)

Hamilton 800 Series Microliter™ Syringes

Cat.No	Model/Needle Term.	Volume	Needle Lenght	Needle Gauge	Point Style
HA-84850	85 N	5 µL	51 mm	26s	2
HA-84852	801 N	10 µL	51 mm	26s	2
HA-84854	802 N	25 µL	51 mm	22s	2
HA-84856	805 N	50 µL	51 mm	22s	2
HA-84858	810 N	100 µL	51 mm	22s	2
HA-84860	825 N	250 µL	51 mm	22s	2
HA-84851	85 RN	5 µL	51 mm	26s	2
HA-84853	801 RN	10 µL	51 mm	26s	2
HA-84855	802 RN	25 µL	51 mm	22s	2
HA-84857	805 RN	50 µL	51 mm	22s	2
HA-84859	810 RN	100 µL	51 mm	22s	2
HA-84861	825 RN	250 µL	51 mm	22s	2

Operating Parameters

- Maximum temperature for Cemented Needle is 50°C and Removable Needle 115°C.
- Maximum test pressure is 6 bar



Replacement Parts

Description	Volume	5 µL	10 µL	25 µL	50 µL	100 µL	250 µL
	Model	85	801	802	805	810	825
1. Barrel/Plunger Assembly N		**HA-32150**	**HA-32151**	**HA-32152**	**HA-32153**	**HA-32154**	**HA-32155**
Barrel/Plunger Assembly SN [1)]		**HA-32105**	**HA-32158**	**HA-32159**	**HA-32160**	**HA-32161**	**HA-32162**
Barrel/Plunger Assembly RN		**HA-32164**	**HA-32165**	**HA-32166**	**HA-32167**	**HA-32168**	**HA-32169**
B/P Assembly Syringe [2)]		**HA-32134**	**HA-32129**	**HA-32117**	**HA-32120**	**HA-32123**	**HA-32126**
2. Holder Assembly		**HA-32135**	**HA-32135**	**HA-32135**	**HA-32135**	**HA-32135**	**HA-32135**
3. RN Nut		**HA-30902**	**HA-30902**	**HA-30902**	**HA-30902**	**HA-30902**	**HA-30902**
4. RN Needle	See specific page						

1) Specify needle gauge, lenght, point style, and wether electro-trapped
2) Needle not included

900 Series MICROLITER™ Syringes

5 µL - 10 µL

- For use with liquids
- Removable needles (RN) or Cemented needles (N)
- Reinforced plungers
- Plungers and syringe barrels are not interchangeable or replaceable

N (Cemented Needle)

RN (Removable Needle)

Hamilton 900 Series Microliter™ Syringes

Cat.No	Model/Needle Term.	Volume	Needle Lenght	Needle Gauge	Point Style
HA-87920	95 N	5 µL	51 mm	26s	2
HA-80360	901 N	10 µL	51 mm	26s	2
HA-87925	95 RN	5 µL	51 mm	26s	2
HA-80370	901 RN	10 µL	51 mm	26s	2

7000 Series MODIFIED MICROLITER™ Syringes

0.5 µL - 5 µL

- For use with liquids
- Removable needles (KH)
- Positive displacement
- Sample contained in the needle
- No dead volume
- Replaceable syringe parts

KH (Knurled Hub)

Hamilton 7000 Series Modified Microliter™ Syringes

Cat.No	Model/Needle Term.	Volume	Needle Lenght	O.D.	Point Style
HA-86257 [1)]	7000.5 OC	0.5 µL	100 mm	0.23	3
HA-86259	7000.5 KH	0.5 µL	70 mm	0.50	2
HA-80135	7001 KH	1 µL	70 mm	0.47	2
HA-86211	7101 KH	1 µL	70 mm	0.70	2
HA-88411	7002 KH	2 µL	70 mm	0.50	2
HA-88511	7102 KH	2 µL	70 mm	0.63	2
HA-88011	7105 KH	5 µL	70 mm	0.56	2
HA-86250	7000.5 KH	0.5 µL	70 mm	0.50	3
HA-80100	7001 KH	1 µL	70 mm	0.47	3
HA-86200	7101 KH	1 µL	70 mm	0.70	3
HA-88400	7002 KH	2 µL	70 mm	0.50	3
HA-88500	7102 KH	2 µL	70 mm	0.63	3
HA-88000	7105 KH	5 µL	70 mm	0.56	3

1) Needle lenght is 100 mm

Hamilton™ Syringes

1700 Series GASTIGHT™ Syringes

10 µL - 500 µL

- For use with gases and liquids
- Precision-machined TEFLON™ PTFE-tipped plungers
- Replaceable plungers

N (Cemented Needle)

RN (Removable Needle)

Hamilton 1700 Series Gastight™ Syringes

Cat.No	Model/Needle Term.	Volume	Needle Lenght	Needle Gauge	Point Style
HA-80000	1701 N	10 µL	51 mm	26s	2
HA-80200	1702 N	25 µL	51 mm	22s	2
HA-80900	1705 N	50 µL	51 mm	22s	2
HA-81000	1710 N	100 µL	51 mm	22s	2
HA-81100	1725 N	250 µL	51 mm	22s	2
HA-81217	1750 N	500 µL	51 mm	22	2
HA-80030	1701 RN	10 µL	51 mm	26s	2
HA-80230	1702 RN	25 µL	51 mm	22s	2
HA-80930	1705 RN	50 µL	51 mm	22s	2
HA-81030	1710 RN	100 µL	51 mm	22s	2
HA-81130	1725 RN	250 µL	51 mm	22s	2
HA-81230	1750 RN	500 µL	51 mm	22	2

1000 Series GASTIGHT™ Syringes

1 mL - 100 mL

- For use with gases and lliquids
- Precision-machined TEFLON™ PTFE-tipped plungers
- Replaceable plungers

Hamilton 1000 Series Gastight™ Syringes

LTN (Cemented Needle)

RN (Removable Needle)

TLL (TEFLON® Luer Lock w/o slots)

TLL (with slots)

Cat.No	Model/Needle Term.	Volume	Needle Lenght	Needle Gauge	Point Style
HA-81317	1001 LTN	1 mL	51 mm	22	2
HA-81330	1001 RN	1 mL	51 mm	22	2
HA-81430	1002 RN	2.5 mL	51 mm	22	2
HA-81530	1005 RN	5 mL	51 mm	22	2
HA-81630	1010 RN	10 mL	51 mm	22	2
HA-81320	1001 TLL w/o slots	1 mL			Needle not included
HA-81420	1002 TLL w/o slots	2.5 mL			Needle not included
HA-81520	1005 TLL w/o slots	5 mL			Needle not included
HA-81620	1010 TLL w/o slots	10 mL			Needle not included
HA-82520 [1]	1025 TLL w/o slots	25 mL			Needle not included
HA-85020 [1]	1050 TLL w/o slots	50 mL			Needle not included
HA-86020	1100 TLL w/o slots	100 mL			Needle not included
HA-81327	1001 TLL with slots	1 mL			Needle not included
HA-81427	1002 TLL with slots	2.5 mL			Needle not included
HA-81527	1005 TLL with slots	5 mL			Needle not included
HA-81627	1010 TLL with slots	10 mL			Needle not included
HA-82527 [1]	1025 TLL with slots	25 mL			Needle not included
HA-85027 [1]	1050 TLL with slots	50 mL			Needle not included

NR (Cemented Needle)

RNR (Removable Needle)

RNCP (GASTIGHT®)

Needles 6pk

Hamilton RNR Microliter™ Serie 600 for Rheodyne Injection Valves

Cat.No	Model/Needle Term.	Volume	Needle Lenght	Needle Gauge	Point Style	Repl.Needles pK/6
HA-87942	62 RNR	2.5 µL	51 mm	22s	3	**HA-7770-01**
HA-87943	65 RNR	5 µL	51 mm	22s	3	**HA-7770-01**

Hamilton NR Microliter™ Serie 700 for Rheodyne Injection Valves

Cat.No	Model/Needle Term.	Volume	Needle Lenght	Needle Gauge	Point Style	Repl.Needles pK/6
HA-80365	701 NR	10 µL	51 mm	22s	3	**HA-7770-01**
HA-80465	702 NR	25 µL	51 mm	22s	3	**HA-7770-01**
HA-80565	705 NR	50 µL	51 mm	22s	3	**HA-7770-01**
HA-80665	710 NR	100 µL	51 mm	22s	3	**HA-7770-01**
HA-80765	725 NR	250 µL	51 mm	22	3	**HA-7780-04**
HA-80865	750 NR	500 µL	51 mm	22	3	**HA-7780-04**

Hamilton N/RNR Microliter™ Serie 1.700 for Rheodyne Injection Valves

Cat.No	Model/Needle Term.	Volume	Needle Lenght	Needle Gauge	Point Style	Repl.Needles pK/6
HA-80275	1702 NR	25 µL	51 mm	22s	3	**---**
HA-80975	1705 NR	50 µL	51 mm	22s	3	**---**
HA-81075	1710 NR	100 µL	51 mm	22s	3	**---**
HA-81175	1725 NR	250 µL	51 mm	22	3	**---**
HA-81216	1750 NR	500 µL	51 mm	22	3	**---**
HA-80065	1701 RNR	10 mL	51 mm	22s	3	**HA-7770-01**
HA-80265	1702 RNR	25 mL	51 mm	22s	3	**HA-7770-01**
HA-80965	1705 RNR	50 mL	51 mm	22s	3	**HA-7770-01**
HA-81065	1710 RNR	100 µL	51 mm	22s	3	**HA-7770-01**
HA-81165	1725 RNR	250 µL	51 mm	22	3	**HA-7780-04**
HA-81265	1750 RNR	500 µL	51 mm	22	3	**HA-7780-04**
HA-81365	1001 RNR	1 mL	51 mm	22	3	**HA-7780-04**

Hamilton RNCP Gastight™ Serie 1.700 and 1.000 only for Valco VSF-1 Injection Valves

Cat.No	Model/Needle Term.	Volume	Needle Lenght	Needle Gauge	Point Style	Repl.Needles pK/6
HA-80231	1702 RNCP	25 µL	19 mm	22s	3	**HA-7787-01**
HA-80931	1705 RNCP	50 µL	19 mm	22s	3	**HA-7787-01**
HA-81031	1710 RNCP	100 µL	19 mm	22s	3	**HA-7787-01**
HA-81131	1725 RNCP	250 µL	19 mm	22s	3	**---**
HA-81231	1750 RNCP	500 µL	19 mm	22	3	**HA-7787-02**
HA-81331	1001 RNCP	1 mL	19 mm	22	3	**HA-7787-02**
HA-81431	1002 RNCP	2.5 mL	19 mm	22	3	**HA-7787-02**
HA-81531	1005 RNCP	5 mL	19 mm	22	3	**HA-7787-02**
HA-81631	1010 RNCP	10 mL	19 mm	22	3	**HA-7787-02**

HPLC Manual Injection Syringes

RNW (Removable Needle)

Needles 6pk

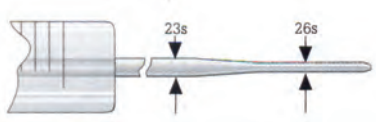
RNW Microliter™ Series 800, 1.700 and 1.800 for Waters™ U6K Injection Valve

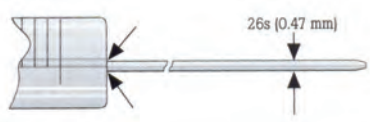
Cat.No	Model/Needle Term.	Volume	Needle Lenght	Needle Gauge	Point Style	Repl. Needles pK/6
HA-84815	801 RNW	10 µL	50 mm	25s	3	**HA-8647-01**
HA-84816	802 RNW	25 µL	50 mm	25s	3	**HA-8647-01**
HA-84817	805 RNW	50 µL	50 mm	25s	3	**HA-8647-01**
HA-84818	810 RNW	100 µL	50 mm	25s	3	**HA-8647-01**
HA-84819	825 RNW	250 µL	50 mm	25s	3	**HA-8648-01**
HA-80038	1701 RNW	10 mL	50 mm	25s	3	**HA-8647-01**
HA-80238	1702 RNW	25 mL	50 mm	25s	3	**HA-8647-01**
HA-80938	1705 RNW	50 mL	50 mm	25s	3	**HA-8647-01**
HA-81038	1710 RNW	100 mL	50 mm	25s	3	**HA-8647-01**
HA-81138	1725 RNW	250 mL	50 mm	25s	3	**HA-8648-01**
HA-84977	1801 RNW	10 mL	50 mm	25s	3	**HA-8647-01**
HA-84980	1802 RNW	25 mL	50 mm	25s	3	**HA-8647-01**
HA-84983	1805 RNW	50 mL	50 mm	25s	3	**HA-8647-01**
HA-84986	1810 RNW	100 mL	50 mm	25s	3	**HA-8647-01**
HA-84989	1825 RNW	250 mL	50 mm	25s	3	**HA-8648-01**

Syringe for Waters™ Pumps

Cat.No	Model/Needle Term.	Volume	Use
HA-81610	1010 W	10 µL	Manual Priming Syringe for Waters Pumps

Syringes for Agilent GC Autosamplers





23s-26s Dual Gauge Tapered Needle

- Most popular needle
- Split/splitless or on-column injections
- Versatility without sacrificing durability

23s Gauge Needle

- Most durable needle
- Merlin Microseal™ and standard septum injections
- Packed column injections
- Split/splitless injections

26s Gauge Needle

- Fine Gauge offers versatility
- On-column injections
- Split/splitless injections

Microliter™ Syringes for Agilent GC Autosamplers 7683, 7673 ALS

Syringe Model & Capacity	75 5 µL	75 5 µL/6 pk	75 5 µL	701 10 µL	701 10 µL	701 10 µL pk/6
ASN 23s (43/AS)	HA-87987	HA-87990	HA-87991 [1]	HA-80387	HA-80398 [1]	HA-80390
ASN 26s (43/AS)	HA-87988	HA-87989	HA-87992 [1]	HA-80338	HA-80399 [1]	HA-80389
ASN 23s-26s (43/AS)	HA-87993	HA-87994	-	HA-80393		HA-80391
ASRN 23s (43/AS)	HA-87957	-	-	HA-80357		
ASRN 26s (43/AS)	HA-87958	-	-	HA-80358		
ASRN 23s-26s (43/AS)	HA-87959	-	-	HA-80359		

1) Point Style 2

Gastight™ Syringes for Agilent GC Autosamplers 7683, 7673 ALS

Syringe Model & Capacity	175 5 µL	175 5 µL/6 pk	1701 10 µL	1701 10 µL/6 pk
ASN 23s (43/AS)	HA-80074	HA-80090	HA-80080	HA-80094
ASN 23s-26s (43/AS)	HA-80076	HA-80092	HA-80079	HA-80096
ASRN 23s (43/AS)	-	-	HA-80087	-
ASRN 26s (43/AS)	-	-	HA-80088	-
ASRN 23s-26s (43/AS)	HA-80086	-	HA-80089	-

Syringes for Agilent GC Autosamplers 7670, 7671, 7672 ALS

Model	Gauge	Volume	Lenght/Point Style	26s
75 N	26s	5 µL	(51/2)	HA-87900
701 N	26s	10 µL	(51/2)	HA-80300
701 RN	26s	10 µL	(51/2)	HA-80338
701 N	26s	10 µL/6 pk	(51/2)	HA-80366
1701 N	26s	10 µL	(51/2)	HA-80000
1701 RN	26s	10 µL	(51/2)	HA-80011

Modified Microliter™ Syringes for Agilent GC Autosamplers 7683, 7673 ALS

Syringe Model & Capacity	7.000.5 0.5 µL	7001 1 µL	7701 1 µL	7702 2 µL
ASRN 23s (43/AS)	HA-86276	HA-80176	-	-
ASRN 26s (43/AS)	HA-86274	-	HA-202460	HA-202980

GC Autosampler Syringes

Six Pack Replacement (RN) Needles for Agilent GC Autosamplers

		Model 7683, 7673 ALS			Model 7670, 7671/72
Volume	**Gauge ****	**23s**	**26s**	**23s-26s**	**26s**
0.5 µL	(**/43/AS)	**HA-38065** [1]	**HA-38063** [1]		
2 µL	(**/43/AS)	-	**HA-202981** [1]		
5 µL & 10 µL	(**/43/AS)	**HA-7786-01**	**HA-7786-02**	**HA-7785-01**	
10 µL	(**/51/2	-	-		**HA-7758-02**

1) Replacement needle offered as repair kit including needle, ferrule, and plunger wire (1/pk)

Equivalent Guide Table for Agilent Automatic Injector 6850 ALS for equipments series 6890 and 6850

Syringes	**Volume**	**G/L/PST/**	**Ref. Agilent**	**Ref. Hamilton**	**Ref. GSE**
Syringe	5 µL	23/32/HP	9301-0892	**HA-87987**	001810
Syringe	5 µL	23-26s/42/HP	5182-0835	**HA-87959**	001825
Syringe	10 µL	26s/42/HP	9301-0714	**HA-80388**	002800
Syringe	10 µL	23-26s/42/HP	5181-1267	**HA-80393**	002821
Syringe	10 µL	23-26s/42/HP	5181-3321	**HA-80359**	002825
Syringe	10 µL	23/42/HP	5181-8806	**HA-80357**	002815
Syringe	5 µL	26s/42/HP	9301-0891	**HA-87988**	001800
Syringe	5 µL	23/42/HP	5182-0834	**HA-87957**	001815
Syringe	5 µL	23-26s/42/HP	5181-1273	**HA-87993**	001821
Syringe, PTFE-tipped plunger	10 µL	23-26s/42/HP	5181-3354	**HA-80079**	002826
Syringe 6/pk	10 µL	23-26s/42/HP	5181-3360	**HA-80321**	002822
Syringe 6/pk	5 µL	23-26s/42/HP	5181-8810	**HA-87994**	001822
Syringe 6/pk	5 µL	23/42/HP	5182-0875	**HA-87990**	001814
Syringe 6/pk	10 µL	23/42/HP	9301-0725	**HA-80390**	002814
Syringe, On-column (barrel only)	5 µL		5182-0836	**HA-7634-01**	
Syringe, PTFE-tipped plunger	100 µL	23-26s/42/HP	5183-2042		005668
Syringe, PTFE-tipped plunger	10 µL	23/42/HP	5181-8809	**HA-80080**	002812
Syringe, PTFE-tipped plunger	10 µL	23/42/HP	5181-8613	**HA-80087**	002818
Syringe, PTFE-tipped plunger	10 µL	23-26s/42/HP	5181-3356	**HA-80089**	002829
Syringe, PTFE-tipped plunger	25 µL	23/42/HP	5183-0316		
Syringe, PTFE-tipped plunger	50 µL	23-26s/42/HP	5183-0314		004668
Syringe, PTFE-tipped plunger	100 µL	23/42/HP	5183-2058		
Syringe, PTFE-tipped plunger	50 µL	23/42/HP	5183-0318		
Syringe, PTFE-tipped plunger, 6/pk	10 µL	23-26s/42/HP	5181-3361	**HA-90096**	00286
Syringe, standard plunger	10 µL	23/42/HP	9301-0713	**HA-80387**	002810
1000 µL Replacement Syringe, for G2250A		G2250-24500			
100 µL Replacement Syringe, for G2250A		G2250-24501			

Syringes for Varian-Chrompack GC Autosamplers

Reference	Model	Volume	Gauge/Lenght/Point Style	Removableneedles(RN),6/pk
Varian CP-8400 - 8410 CP-9010 - 9050				
HA-87900	75 N	5 µL	(26s/51/2)	
HA-80366	701 N	10 µL 6/pk	(26s/51/2)	
HA-80300	701 N	10 µL	(26s/51/2)	
HA-202950	7701 N	1 µL	(.48/51/AS)	
Varian-Chrompack 9020/9025				
HA-202660	1002 LT HS 22	2.5 mL	(22/51/AS)	

Equivalent Guide Table for Varian-Chrompack. CP-8400, CP-8410, CP-9010, CP-9050, CP-9020, CP-9025

Hamilton	Volume	Varian-Chrompack	GSE
HA-87900	5 µL	HM 87900	001000
HA-80300	10 µL	HM 80300	002950
HA-80308	10 µL	SK 0163520	002005
HA-202660	2.5 µL	HM 202660	-

Syringes for Shimadzu GC Autosamplers

Reference	Model	Volume	Gauge/Lenght Point Style	Removable needles (RN), 6/pk	Equivalence SGE
Shimadtzu AOC-9					
HA-87930	75 RN 26s	5 µL	(26s/51/2)	**HA-7758-02**	
HA-80330	701 RN 26s	10 µL	(26s/51/2)	**HA-7758-02**	
Shimadtzu AOC-14/17/20					
HA-202630	75 RSN	5 µL	(22s/43/2)	**HA-202645**	
HA-202640	701 RSN	10 µL	(22s/43/2)	**HA-202645**	SGE002898

Syringes for ThermoFinnigan GC Autosamplers

Reference	Model	Volume	Gauge/Lenght/Point Style	Equivalence SGE
Thermo Finnigan HS 250/500/850				
HA-202660	1002 LTN HS 22	2.5 mL	(22/51/5)	
HA-202670	1002 LTN HS	2.5 mL	without needle	
Thermo Finnigan AS 800/2000				
HA-202066	701 SN Fisons	10 µL	(26s/80/AS)	002992
Thermo Finnigan AI/AS 3000				
HA-204000	75 SN	5 µL	(26s/50/2)	
HA-204001	701 SN	10 µL	(26s/50/2)	
HA-204051	75 SN	5 µL	(26s/50/AS)	
HA-204052	701 SN	10 µL	(26s/50/AS)	
HA-204922	1701 RN	10 µL	(26s/50/2)	

GC Autosampler Syringes

Syringes for Perkin-Elmer™ Autosystem GC and Clarus 500 GC

Reference	Model	Volume	O.D./Lenght/Point Style
Perkin Elmer Autosystem			
HA-88040	75 ASN/PE	5 µL	(0.47/70/3)
HA-88035	75 ASN/PE	5 µL	(0.63/70/3)

Syringes for CTC Combi PAL and GC PAL GC Autosamplers

Reference	Model	Volume	Gauge/Point Style	Plunger Assembly, 10 pk
HA-203185	7701.2 CTC	1.2 µL	(0.48 MM O.D./AS)	
HA-203189	75 N CTC (26s/AS)	5 µL	(26s/AS)	
HA-203197 [1)]	75 SN CTC (*/*)	5 µL	(*/*)	
HA-203361	701 N CTC (23s/AS)	10 µL	(23s/AS)	
HA-203362	701 N CTC (23s/26s/AS)	10 µL	(23s-26s/AS)	
HA-203363	701 N CTC (23s/2)	10 µL	(23s/2)	
HA-203072	701 N CTC (26s/2)	10 µL	(26s/2)	
HA-203205	701 N CTC (26s/AS)	10 µL	(26s/AS)	
HA-203198 [1)]	701 SN CTC (*/*)	10 µL	(*/*)	
HA-203206 [1)]	1701 SN CTC (*/*)	10 µL	(*/*)	
HA-203043	1702 CTC (26s/AS)	25 µL	(26s/AS)	**HA-203245**
HA-203074	1702 CTC (26s/AS) Slim Line	25 µL	(26s/AS)	**HA-203245**
HA-203275	1702 CTC (*/*) Slim Line	25 µL	(*/*)	**HA-203245**
HA-203209 [1)]	1702 SN CTC (*/*)	25 µL	(*/*)	**HA-203245**
HA-203076	1710 CTC (26s/AS)	100 µL	(26s/AS)	**HA-203246**
HA-203226 [1)]	1710 SN CTC (*/*)	100 µL	(*/*)	**HA-203246**
HA-203078	1725 CTC (26s/AS)	250 µL	(26s/AS)	**HA-203249**
HA-203219 [1)]	1725 SN CTC (*/*)	250 µL	(*/*)	**HA-203249**
HA-203080	1750 CTC (26s/AS)	500 µL	(26s/AS)	**HA-203254**
HA-203225 [1)]	1750 CTC (*/*)	500 µL	(*/*)	**HA-203254**

1) Specify needle gauge, point style, and whether electro-tapered

Syringes for Head Space version for CTC

Reference	Model	Volume	Gauge/Point Style	Plunger Assembly, 1 pk
HA-203082	1001 CTC (23/5)	1 mL	(23/5)	**HA-203255**
HA-203141	1001 CTC (26/5)	1 mL	(26/5)	**HA-203255**
HA-203084	1002 CTC (23/5)	2.5 mL	(23/5)	**HA-203256**
HA-203181	1002 CTC (26/5)	2.5 mL	(26/5)	**HA-203256**
HA-203086	1005 CTC (23/5)	5 mL	(23/5)	**HA-203259**
HA-203182	1005 CTC (26/5)	5 mL	(26/5)	**HA-203259**

Syringes for On-Column Grob GC Injection

Reference	Model	Volume	Gauge/Point Style
HA-200740	701 N Grob	10 µL	(0.23/85/45°)
HA-200741	75 N Grob	5 µL	(0.23/85/45°)
HA-200742	701 N Grob	10 µL	(0.23/75/45°)
HA-200743	75 N Grob	5 µL	(0.23/75/45°)

Syringes for Agilent 1090A LC Autosampler

Reference	Model	Volume
HA-202315	1072 RN w/o needle	25 µL
HA-202325	1075 RN w/o needle	250 µL

Syringes for Shimadtzu SIL-6A LC Autosampler

Reference	Model	Volume
HA-7656-01	1710 RN no needle	100 µL

Syringes for Perkin-Elmer™ LC Autosamplers

Reference	Model	Volume
Perkin Elmer Integral™ 4000		
HA-81163	1725 T/PE	250 µL
Perkin Elmer Series 200 Autosampler		
HA-80962	1705 CX	50 µL
HA-81162	1725 CX	250 µL
HA-81262	1750 CX	500 µL
HA-81360	1001 C	1 mL
HA-81460	1002 C	2.5 mL

Syringes for Varian 9100 LC Autosampler

Reference	Model	Volume
HA-0159902	1710 C Special	100 µL

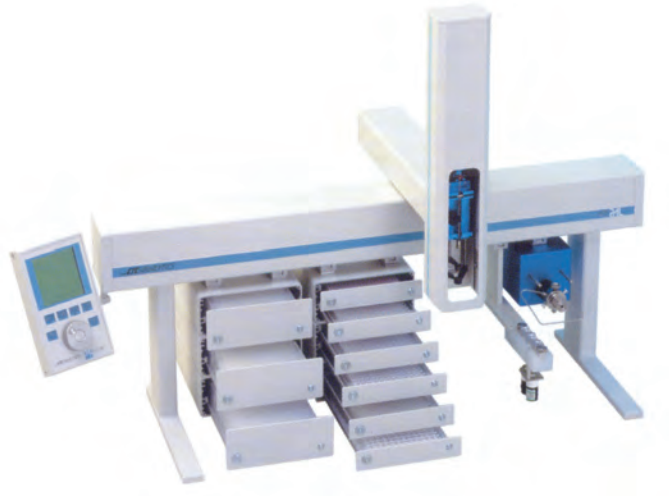
Syringes for Waters™ Wisp™ LC Autosampler

Reference	Model	Volume	Use
HA-80020	1702 WISP	25 µL	WISP Autosampler
HA-80024	1725 WISP	250 µL	WISP Autosampler
HA-81610	1010 W	10 mL	Manual Primming Syringe for WATERS Pumps

Syringes for Spectra-Physics/ThermoFinnigan LC Autosamplers

Reference	Model	Volume
SP8780/8875/8880		
HA-202192	1750 C	500 µL
HA-81460	1002 C	2.5 mL
AS100/300/AS1000/3000/3500		
HA-81162	1725 C	250 µL
HA-81262	1750 C	500 µL
HA-81360	1001 C	1 mL
HA-81460	1002 C	2.5 mL

HPLC Autosampler Syringes



Syringes for CTC LC Autosamplers

Reference	Model	Volume	Plunger Assembly, 10/pk
LC/HTC/HTS PAL			
HA-203073	701 N CTN (22s/3)	10 µL	
HA-203194	1701 N CTN (22s/3)	10 µL	**HA-203239**
HA-203075	1702 N CTN (22s/3)	25 µL	**HA-203245**
HA-203274	1702 N CTN (22s/51/3) Slim Line	25 µL	**HA-203276**
HA-203077	1710 N CTN (22s/3)	100 µL	**HA-203246**
HA-203235	1710 N CTN (22s/3)	100 µL	**HA-203246**
HA-203079	1725 N CTN (22s/3)	250 µL	**HA-203249**
HA-203349	1750 N CTN (22s/3)	500 µL	**HA-203254**
HA-203081	1001 CTC (22s/3)	1 mL	**HA-203255***
HA-203083	1002 CTC (22s/3)	2.5 mL	**HA-203256***
HA-203085	1005 CTC (22s/3)	5 mL	**HA-203259***
A200S			
HA-203560	1701 CTC (22s/3) A200S	10 µL	**HA-203562**
HA-203563	1702 CTC (22s/3) A200S	25 µL	**HA-203565**
HA-203566	1710 CTC (22s/3) A200S	100 µL	**HA-203569**

** Plunger Assembly 1/pk*

Syringes for Konton 360, 460, and 465 LC Autosamplers

Reference	Model	Volume
HA-201050	1710 AD	100 µL

Syringes for Gynkotek Gina/Dionex ASI-100 LC Autosamplers

Reference	Model	Volume
HA-7654-01	1702 RN w/o Needle	25 µL
HA-7657-01	1725 RN w/o Needle	250 µL

Syringes for Hitachi L-7200/7250, AS1000/ 2000/42000, and LaChrom LC Autosamplers

Reference	Model	Volume
HA-0160310	1750 Special	500 µL

Removable Needles

- Convinient SIX PACKS
- For use with RN-style syringes and connectors
- 304 stainless steel (sst.) needle
- Standard needle lenght: 51 mm

Small Gauge Needles (27-33) for 2.5 - 100 µL Syringes

All needles sold in 6 packs.

Small Gauge Needles
27 - 33

Gauge	Point Style 2	Point Style 3	Point Style 5	Custom Needles [1]	Custom [2] Point Styles 2, 3, 4, AS
33	-	HA-7762-06	-	-	HA-2074-30
32	-	HA-7762-05	-	-	HA-7803-04
31	-	HA-7762-04	-	-	HA-7803-03
30	-	HA-7762-03	-	-	HA-7803-07
28	-	HA-7762-02	-	-	HA-7803-02
27	-	HA-7762-01	-	-	HA-7803-01

Large Gauge Needles (26s-22) for 2.5 - 100 µL Syringes

All needles sold in 6 packs.

Large Gauge Needles
26s - 22

Gauge	Point Style 2	Point Style 3	Point Style 5	Custom Needles [1]	Custom [2] Point Styles 2, 3, 4, AS
26s	HA-7758-02	HA-7768-01	HA-7784-07	HA-7731-02	HA-7804-04
26	HA-7758-04	HA-7768-02	HA-7784-08	HA-7731-01	HA-7804-03
22s	HA-7758-03	HA-7770-01	HA-7784-05	HA-7731-04	HA-7804-02
22	HA-7758-01	HA-7770-02	HA-7784-06	HA-7731-03	HA-7804-01

Large Gauge Needles (26s-22) for 250 µL - 10 mL Syringes

All needles sold in 6 packs.

Gauge	Point Style 2	Point Style 3	Point Style 5	Custom Needles [1]	Custom [2] Point Styles 2, 3, 4, AS
26s	HA-7779-02	HA-7780-01	HA-7784-03	HA-7732-04	HA-7806-04
26	HA-7779-04	HA-7780-02	HA-7784-04	HA-7732-03	HA-7806-03
22s	HA-7779-03	HA-7780-03	HA-7784-01	HA-7732-02	HA-7806-02
22	HA-7779-01	HA-7780-04	HA-7784-02	HA-7732-01	HA-7806-01

1) Please specify lenght, and wether electro-tapered (Point style 5)
2) Please specify lenght, point style, and wether electro-tapered

PEEK RN and Kel-F™ Hub Needles

PEEK RN and Kel-F™
Needles

- When contact with stainless steel must be avoided
- Standard 51 mm long needle, O.D. 1.52 mm, I.D. 0.76 mm

Reference	Description	Used with syringe
HA-8650-01	Removable (RN) needle, pk/6	250 µL RN Syringes
HA-8649-01	Kel-F™ (KF) hub needle, pk/6	All LT and TLL Syringes

Syringe Needles

Hub Needles

- Metal hub (N) or Kel-F™ (KF)needles in convenient SIX PACKS, SST tubing (no hub) IN SINGLE PACKS.
- Metal hub (nickel plated brass) for use with TLL syringes and LT or TLL connectors, Kel-F™ hub for use with LT and TLL syringes and connectors.
- 304 stainless steel (stt.) needle
- Standard needle lenght: 51 mm

Metal Hub Needles

Metal Hub (N)

All needles sold in 6 packs.

Needles Pt.St. 2, 3, 4, AS [2]	STT [2] Gauge	Tubing No Hub	Point Style 2	Point Style 3	Point Style 5	Custom N. Custom Needles [1]
33	HA-21033	HA-90033	HA-91033	-	-	HA-7747-01
32	HA-21032	HA-90032	-	-	-	-
31	HA-21031	HA-90031	HA-91031	-	-	HA-7748-17
30	HA-21030	HA-90030	HA-91030	-	-	HA-7748-16
29	HA-21029	HA-90029	-	-	-	-
28	HA-21028	HA-90028	HA-91028	-	-	HA-7748-14
27	HA-21027	HA-90027	HA-91027	-	-	HA-7748-13
26s	HA-21039	HA-90039	HA-91039	HA-7729-01	HA-7751-19	HA-7748-19
26	HA-21026	HA-90026	HA-91026	HA-7729-03	HA-7751-17	HA-7748-12
25	HA-21025	HA-90025	HA-91025	HA-7729-04	HA-7751-16	HA-7748-11
24	HA-21024	HA-90024	HA-91024	HA-7729-05	HA-7751-15	HA-7748-10
23	HA-21023	HA-90023	HA-91023	HA-7729-06	HA-7751-14	HA-7748-09
22s	HA-21038	HA-90038	HA-91038	HA-7729-02	HA-7751-18	HA-7748-18
22	HA-21022	HA-90022	HA-91022	HA-7729-07	HA-7751-13	HA-7748-08
21	HA-21021	HA-90021	HA-91021	HA-7729-08	HA-7751-12	HA-7748-07
20	HA-21020	HA-90020	HA-91020	HA-7729-09	HA-7751-11	HA-7748-06
19	HA-21019	HA-90019	-	-	-	HA-90319
18	HA-21018	HA-90018	HA-91018	HA-7729-10	HA-7751-09	HA-7748-04
17	HA-21017	HA-90017	HA-91017	HA-7729-11	HA-7751-08	HA-7748-03
16	HA-21016	HA-90016	HA-91016	HA-7729-12	HA-7751-07	HA-7748-02
15	HA-21015	HA-90015	-	-	-	HA-90315
14	HA-21014	HA-90014	HA-91014	-	-	HA-7749-05
13	HA-21013	HA-90013	HA-91013	-	-	HA-7749-04
12	HA-21012	HA-90012	HA-91012	-	-	HA-7749-03
11	HA-21011	HA-90011	HA-91011	-	-	HA-7749-02
10	HA-21010	HA-90010	HA-91010	-	-	HA-7749-01

1) Please specify lenght, and wether electro-tapered (Point style 5)
2) Please specify lenght, point style, and wether electro-tapered

Hel-F™ Hub (KF)

All needles sold in 6 packs.

Hel-F™ Hub (KF)

Pt.St. 2, 3, 4, AS Gauge	Point	Point Style 2	Point Style 3	Custom Style 5	Custom Needles Needles [1]
31	HA-90131	HA-90531	-	-	HA-7750-22
30	HA-90130	HA-90530	-	-	HA-7750-21
29	HA-90129	-	-	-	-
28	HA-90128	HA-90528	-	-	HA-7750-19
27	HA-90127	HA-90532	-	-	HA-7750-18
26s	HA-90139	HA-90539	HA-7746-12	HA-7752-19	HA-7750-24
26	HA-90126	HA-90533	HA-7746-10	HA-7752-17	HA-7750-17
25	HA-90125	HA-90525	HA-7746-09	HA-7752-16	HA-7750-16
24	HA-90124	HA-90524	HA-7746-08	HA-7752-15	HA-7750-15
23	HA-90123	HA-90523	HA-7746-07	HA-7752-14	HA-7750-14
22s	HA-90138	HA-90534	HA-7746-11	HA-7752-18	HA-7750-23
22	HA-90122	HA-90134	HA-7746-06	HA-7752-13	HA-7750-13
21	HA-90121	HA-90521	HA-7746-05	HA-7752-12	HA-7750-12
20	HA-90120	HA-90520	HA-7746-04	HA-7752-11	HA-7750-11
19	HA-90119	-	-	-	HA-90369
18	HA-90118	HA-90535	HA-7746-03	HA-7752-09	HA-7750-09
17	HA-90117	HA-90517	HA-7746-02	HA-7752-08	HA-7750-08
16	HA-90116	HA-90516	HA-7746-01	HA-7752-07	HA-7750-07
15	HA-90115	-	-	-	-
14	HA-90114	-	-	HA-7752-05	HA-7750-05
13	HA-90113	-	-	HA-7752-04	HA-7750-04
12	HA-90112	-	-	HA-7752-03	HA-7750-03
11	HA-90111	-	-	HA-7752-02	HA-7750-02
10	HA-90110	-	-	HA-7752-01	HA-7750-01

1) Please specify lenght, and wether electro-tapered (Point style 5)
2) Please specify lenght, point style, and wether electro-tapered

IK Needle Gauge Index

Gauge	I.D. (mm)	I.D Tolerance (mm)	O.D. (mm)	O.D. Tolerance (mm)	Wall Thickness (mm)	Volume (mm)
34	0.06	0.02	0.16	0.01	0.05	0.03
33	0.11	0.02	0.21	0.01	0.05	0.10
32	0.11	0.02	0.24	0.01	0.07	0.10
31	0.13	0.02	0.26	0.01	0.07	0.13
30	0.16	0.02	0.31	0.01	0.08	0.20
29	0.18	0.02	0.34	0.01	0.08	0.25
28	0.18	0.02	0.36	0.01	0.09	0.25
27	0.21	0.02	0.41	0.01	0.10	0.35
26s	0.13	0.015	0.47	0.01	0.17	0.13
26	0.26	0.02	0.46	0.01	0.10	0.53
25s	0.15	0.015	0.52	0.01	0.19	0.18
25	0.26	0.02	0.52	0.01	0.13	0.53
24	0.31	0.02	0.57	0.01	0.13	0.75
23s	0.09	0.02	0.64	0.03	0.28	0.06
23	0.34	0.02	0.64	0.01	0.15	0.91
22s	0.15	0.015	0.72	0.01	0.29	0.18
22	0.41	0.02	0.72	0.01	0.16	1.32
21	0.51	0.02	0.83	0.01	0.16	2.04
20	0.60	0.02	0.91	0.01	0.16	2.83
19	0.69	0.04	1.17	0.015	0.19	3.74
18	0.84	0.04	1.27	0.015	0.22	5.54
17	1.07	0.04	1.47	0.015	0.20	8.99
16	1.19	0.04	1.65	0.015	0.23	11.12
15	1.37	0.04	1.83	0.015	0.23	14.74
14	1.60	0.05	2.11	0.025	0.26	20.11
13	1.80	0.05	2.41	0.025	0.31	5.45
12	2.16	0.05	2.77	0.025	0.31	36.64
11	2.39	0.05	3.05	0.025	0.33	44.86
10	2.69	0.05	3.40	0.025	0.36	56.83

Equipamientos Analíticos S.A
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