

## Hamilton Syringes

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# Hamilton™ Syringes



## The Measure of Excellence

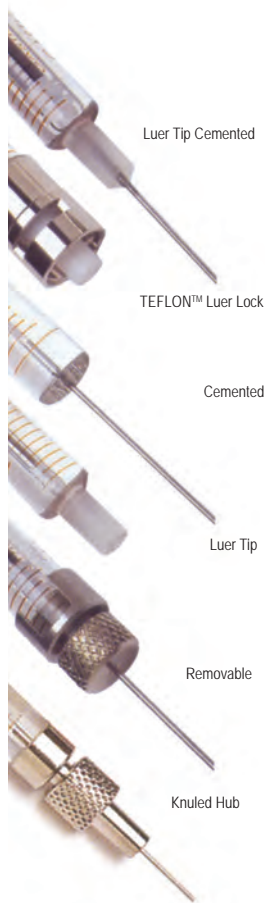
### Highest quality materials

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 Accuracy 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 (LTN)**  
- ground glass tip with a cemented needle; not recommended for use with halogenated solvents, such as MeCl<sub>2</sub>
- **TEFLON™ Luer Lock (TLL)**  
- can be used with luer (Metal of Kel-F®) hub needles, TEFLON® tubing assemblies and connectors can be used, offer flexibility.
- **Cemented (N)**  
- not recommended for use with halogenated solvents, such as MeCl<sub>2</sub>
- **Luer Tip (LT)**  
- 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 (RN)**  
- advantageous for laboratories with multiple users; economical since you can replace the needle without having to purchase a new syringe
- **Knurled Hub (KH)**  
- 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 - 12° 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 - 12° bevelled needle point recommended for life science applications; especial point styles such as 12°, and 45° are available on request.
- **Point Style 5**  
- conical needle with side port of penetration of septa, thin-gauged vinyls and plastics without coring; 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 plunger and the barrel



### Hamilton 700 Series Microliter™ Syringes

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



N (Cemented Needle)



RN (Removable Needle)



LT (Cemented Needle)



### Hamilton Syringes Six pack

Cat.No	Model	Volume	Needle Length	Needle Gauge	Point Style
<b>HA-80366</b>	701 N, pk/6	10 µL	51 mm	26s	2
<b>HA-80336</b>	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	Volume	Needle Length	Needle Gauge	Point Style
<b>HA-87942</b>	62 RN	2.5 µL	51 mm	22s	3
<b>HA-87943</b>	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)

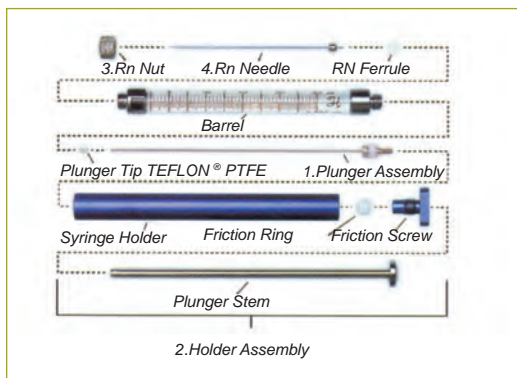


### Hamilton 800 Series Microliter™ Syringes

Cat.No	Model	Volume	Needle Length	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 Model	5 µL 85	10 µL 801	25 µL 802	50 µL 805	100 µL 810	250 µL 825
1. Barrel/Plunger Assembly N		HA-32150	HA-32151	HA-32152	HA-32153	HA-32154	HA-32155
Barrel/Plunger Assembly SN <sup>1)</sup>		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 <sup>2)</sup>		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, length, point style, and whether 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	Volume	Needle Length	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	Volume	Needle Length	O.D.	Point Style
HA-86257 <sup>1)</sup>	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 length 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



### Hamilton 1700 Series Gastight™ Syringes

Cat.No	Model	Volume	Needle Length	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



N (Cemented Needle)



RN (Removable Needle)



## 1000 Series GASTIGHT™ Syringes

1 mL - 100 mL

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



### Hamilton 1000 Series Gastight™ Syringes

Cat.No	Model	Volume	Needle Length	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 <sup>1)</sup>	1025 TLL w/o slots	25 mL			Needle not included
HA-85020 <sup>1)</sup>	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 <sup>1)</sup>	1025 TLL with slots	25 mL			Needle not included
HA-85027 <sup>1)</sup>	1050 TLL with slots	50 mL			Needle not included



LTN (Cemented Needle)



RN (Removable Needle)



TLL (TEFLON®  
Luer Lock w/o slots)



TLL (with slots)



1) TLL male luer fitting is made of Kel-F® (CTFE) material instead of TEFLON® PTFE

# HPLC Manual Injection Syringes



## Hamilton RNR Microliter™ Serie 600 for Rheodyne Injection Valves

Cat.No	Model	Volume	Needle Length	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	Volume	Needle Length	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



NR (Cemented Needle)



RNR (Removable Needle)



RNCP (GASTIGHT®)



Needles 6pk

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

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

## Syringe for Waters™ Pumps

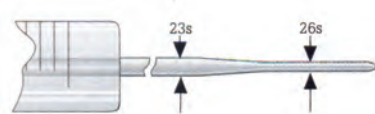
Cat.No	Model	Volume	Use
<b>HA-81610</b>	1010 W	10 µL	Manual Priming Syringe for Waters Pumps



# GC Autosampler Syringes



## Syringes for Agilent GC Autosamplers



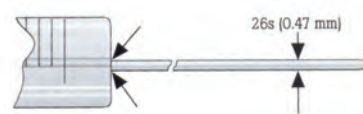
23s-26s Dual Gauge Tapered Needle

- 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

## Syringes for Agilent GC Autosamplers 7683, 7673 ALS

Cat.No	Volume	Syringe Type	Termination	Gauge	Point style
HA-80000	10 µL	Gastight	N	26s	2
HA-80011	10 µL	Gastight	RN	26s	2
HA-80300	10 µL	Microliter	N	26s	2
HA-80338	10 µL	Microliter	RN	26s	2
HA-87900	5 µL	Microliter	N	26s	2

## Syringes for Agilent 7693A, 7673, 7683, and 6850 ALS

Cat.No	Volume	Syringe Type	Termination	Gauge	Point style
HA-86274	0,5 µL	Microliter	Special	26s	AS
HA-86276	0,5 µL	Microliter	Special	23s	AS
HA-80175	1 µL	Microliter	Special	26s	AS
HA-80176	1 µL	Microliter	Special	23s	AS
HA-87957	5 µL	Microliter	RN	23s	AS
HA-87958	5 µL	Microliter	RN	26s	AS
HA-87959	5 µL	Microliter	RN	23s-26s	AS
HA-87987	5 µL	Microliter	N	23s	AS
HA-87988	5 µL	Microliter	N	26s	AS
HA-87991	5 µL	Microliter	N	23s	2
HA-87992	5 µL	Microliter	N	26s	2
HA-87993	5 µL	Microliter	N	23s-26s	AS
HA-80079	10 µL	Gastight	N	23s-26s	AS
HA-80080	10 µL	Gastight	N	23s	AS
HA-80087	10 µL	Gastight	RN	23s	AS
HA-80088	10 µL	Gastight	RN	26s	AS
HA-80089	10 µL	Gastight	RN	23s-26s	AS
HA-80357	10 µL	Microliter	RN	23s	AS
HA-80358	10 µL	Microliter	RN	26s	AS
HA-80359	10 µL	Microliter	RN	23s-26s	AS
HA-80387	10 µL	Microliter	N	23s	AS
HA-80388	10 µL	Microliter	N	26s	AS
HA-80393	10 µL	Microliter	N	23s-26s	AS
HA-80398	10 µL	Microliter	N	23s	2
HA-80399	10 µL	Microliter	N	26s	2



## GC Autosampler Syringes

### Equivalent Guide Table for Agilent Autosampler 6850 ALS for equipments series 6890 and 6850

Syringes	Volume	G/L/PST/	Ref. Agilent	Ref. Hamilton	Ref. SGE
Syringe	5 µL	23/32/HP	9301-0892	<b>HA-87987</b>	001810
Syringe	5 µL	23-26s/42/HP	5182-0835	<b>HA-87959</b>	001825
Syringe	10 µL	26s/42/HP	9301-0714	<b>HA-80388</b>	002800
Syringe	10 µL	23-26s/42/HP	5181-1267	<b>HA-80393</b>	002821
Syringe	10 µL	23-26s/42/HP	5181-3321	<b>HA-80359</b>	002825
Syringe	10 µL	23/42/HP	5181-8806	<b>HA-80357</b>	002815
Syringe	5 µL	26s/42/HP	9301-0891	<b>HA-87988</b>	001800
Syringe	5 µL	23/42/HP	5182-0834	<b>HA-87957</b>	001815
Syringe	5 µL	23-26s/42/HP	5181-1273	<b>HA-87993</b>	001821
Syringe, PTFE-tipped plunger	10 µL	23-26s/42/HP	5181-3354	<b>HA-80079</b>	002826
Syringe, On-column (barrel only)	5 µL		5182-0836	<b>HA-7634-01</b>	
Syringe, PTFE-tipped plunger	100 µL	23-26s/42/HP	5183-2042		005668
Syringe, PTFE-tipped plunger	10 µL	23/42/HP	5181-8809	<b>HA-80080</b>	002812
Syringe, PTFE-tipped plunger	10 µL	23/42/HP	5181-8613	<b>HA-80087</b>	002818
Syringe, PTFE-tipped plunger	10 µL	23-26s/42/HP	5181-3356	<b>HA-80089</b>	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	<b>HA-90096</b>	00286
Syringe, standard plunger	10 µL	23/42/HP	9301-0713	<b>HA-80387</b>	002810
1000 µL Replacement Syringe, for G2250A		G2250-24500			
100 µL Replacement Syringe, for G2250A		G2250-24501			

# GC Autosampler Syringes



## Bruker Varian 8100 and 8200 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-202903 (pk/6)	-	-	-	RN	(26s/57/5)
HA-202880	10 µL	Microliter	700	RN	(26s/57/5)

## Chrompack CP-8400 CP-8410 CP-9010 and CP-9050 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-80300	10 µL	Microliter	701	N	(26s/51/2)
HA-80330	10 µL	Microliter	701	RN	(26s/51/2)
HA-80339	10 µL	Microliter	701	N	(26s/51/5)
HA-80342	10 µL	Microliter	701	N	(23s/51/AS)

## Bruker Varian CP-9020 and CP-9025 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-202660	2,5 µL	Gastight	1002	LTN	(22/56/5)

## Shimadzu AOC-5000 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-203082	1 mL	Gastight	1001	LTN	(23/5)
HA-203141	1 mL	Gastight	1001	LTN	(26/5)
HA-209681	1 mL	Gastight, Headspace	1001	Glue-Free (GF)	(23/5)
HA-209682	1 mL	Gastight, Headspace	1001	Glue-Free (GF)	(26/5)
HA-203084	2.5 mL	Gastight	1002	LTN	(23/5)
HA-203181	2.5 mL	Gastight	1002	LTN	(26/5)
HA-209683	2.5 mL	Gastight, Headspace	1002	GF	(23/5)
HA-209684	2.5 mL	Gastight, Headspace	1002	GF	(26/5)
HA-203086	5 mL	Gastight	1005	LTN	(23/5)
HA-203182	5 mL	Gastight	1005	LTN	(26/5)
HA-209685	5 mL	Gastight	1005	GF	(23/5)
HA-209686	5 mL	Gastight	1005	GF	(26/5)

## Shimadzu AOC-14 AOC-17 and AOC-20 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-202630	5 µL	Microliter	75	RN	(22s/43/2)
HA-93898-01	10 µL	Microliter	701	N	(23/43/AS)
HA-202640	10 µL	Microliter	701	RN	(22s/43/2)
HA-202643	10 µL	Microliter	701	N	(23/43/AS)

## Shimadzu AOC-9 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-87930	5 µL	Microliter	75	RN	(26s/51/2)
HA-80330	10 µL	Microliter	701	RN	(26s/51/2)



## GC Autosampler Syringes

### Syringes for ThermoFinnigan GC Autosamplers HS 250, HS 500, and HS 850 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-202660	2.5 mL	Gastight	1002	LTN	(22/56/5)

### AS 800 and AS 2000 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-80318	10 µL	Microliter	701	N	(26s/80/AS)

### AI 3000 and AS 3000 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-204000	5 µL	Microliter	75	N	(26s/50/2)
HA-204051	5 µL	Microliter	75	N	(26s/50/AS)
HA-204001	10 µL	Microliter	701	N	(26s/50/2)
HA-204052	10 µL	Microliter	701	N	(26s/50/AS)

### Syringes for CTC Combi PAL and GC PAL GC Autosamplers

#### GC S-Line Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-67436-01	5 µL	Microliter	75	N	(26s/51/AS)
HA-67438-01	10 µL	Microliter	701	N	(26s/51/AS)
HA-67440-01	10 µL	Microliter	701	N	(23s/51/AS)
HA-67454-01	10 µL	Microliter	1701	N	(23s/51/AS)
HA-67430-01	25 µL	Gastight	1702	N	(23s/51/AS)
HA-67434-01	100 µL	Gastight	1710	N	(23s/51/AS)

#### GC C-Line Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-203185	1.2 µL	Microliter	7701.2	KN	(26/51/AS)
HA-203189	5 µL	Microliter	7701.2	FN	(26s/51/AS)
HA-203189	5 µL	Microliter	7701.2	SFN	(C/51/C)
HA-200740	10 µL	Microliter	701	N	(32/85/45°)
HA-200742	10 µL	Microliter	701	N	(32/85/45°)
HA-203072	10 µL	Microliter	701	FN	(26s/51/2)
HA-203198	10 µL	Microliter	701	SFN	(C/51/C)
HA-203205	10 µL	Microliter	701	FN	(26s/51/AS)
HA-203206	10 µL	Gastight	701	FN	(C/51/C)
HA-203361	10 µL	Microliter	701	FN	(23s/51/AS)
HA-203362	10 µL	Microliter	701	FN	(23-26s/51/AS)
HA-203363	10 µL	Microliter	701	FN	(23s/51/2)
HA-203043*	25 µL	Gastight	1702 (7.9mm)	FN	(26s/51/AS)
HA-203074	25 µL	Gastight	1702	FN	(26s/51/AS)
HA-203209	25 µL	Gastight	1702	SFN	(C/51/C)
HA-203076	100 µL	Gastight	1710	FN	(26s/51/AS)
HA-203226	100 µL	Gastight	1710	SFN	(C/51/C)
HA-203078	250 µL	Gastight	1725	FN	(26/51/AS)
HA-203219	250 µL	Gastight	1725	SFN	(C/51/C)
HA-203080	500 µL	Gastight	1725	FN	(26/51/AS)
HA-203225	500 µL	Gastight	1750	SFN	(C/51/C)

## CTC LEAP CombiPAL HDHT Headspace Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-209681	1 mL	Gastight, Headspace	1001	GF	(23/51/5)
HA-209682	1 mL	Gastight, Headspace	1001	GF	(26/51/5)
HA-209683	2.5 mL	Gastight, Headspace	1001	GF	(23/51/5)
HA-209684	2.5 mL	Gastight, Headspace	1001	GF	(26/51/5)
HA-209685	5 mL	Gastight, Headspace	1005	GF	(23/51/5)
HA-209686	5 mL	Gastight, Headspace	1005	GF	(26/51/5)

## CTC LEAP CombiPAL HD Headspace Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-203082	1 mL	Gastight	1001	LTN	(23/51/5)
HA-203141	1 mL	Gastight	1001	LTN	(26/51/5)
HA-203141	2.5 mL	Gastight	1002	LTN	(23/51/5)
HA-203181	2.5 mL	Gastight	1002	LTN	(26/51/5)
HA-203086	5 mL	Gastight	1005	LTN	(23/51/5)
HA-203086	5 mL	Gastight	1005	LTN	(26/51/5)



## Perkin Elmer GC Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-88040	5 µL	Microliter	75	N	(26/70/3)
HA-88035	5 µL	Microliter	75	N	(23/70/3)



# HPLC Autosampler Syringes

## Agilent 1090A Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-80230	25 µL	Gastight	1700	RN	(22s/51/2)
HA-81130	250 µL	Gastight	1725	RN	(22s/51/2)



## Agilent 1290 Infinity LC Injector HTC HTS Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-67444-01	10 µL	Gastight	1701	N	(22s/51/3)
HA-203073	10 µL	Microliter	701	FN	(22s/51/3)
HA-203194	10 µL	Gastight	1701	FN	(22s/51/3)
HA-67446-01	25 µL	Gastight	1702	N	(22s/51/3)
HA-203075	25 µL	Gastight	1702 (7.9 mm)	FN (no Glue)	(22s/51/3)
HA-203274	25 µL	Gastight	1702 (6.6 mm)	FN	(22s/51/3)
HA-204475	25 µL	Gastight	1702 (7.9 mm)	FN (no Glue)	(22s/51/3)
HA-67450-01	50 µL	Gastight	1705	N	(22s/51/3)
HA-204379	50 µL	Gastight	1705	FN	(22s/51/3)
HA-67452-01	100 µL	Gastight	1710 (6.6 mm)	N	(22s/51/3)
HA-202668	100 µL	Gastight	1710	RN	NN
HA-203077	100 µL	Gastight	1710	FN (no Glue)	(22s/51/3)
HA-203235	100 µL	Gastight	1710	FN	(22s/51/3)
HA-204400	100 µL	Gastight	1710	FN (no Glue)	(22s/51/3)
HA-204452	100 µL	Gastight	1710	FN (no Glue)	(22s/51/3)
HA-67442-01	250 µL	Gastight	1725	N	(22s/51/3)
HA-203079	250 µL	Gastight	1725	FN	(22s/51/3)
HA-67448-01	500 µL	Gastight	1750	N	(22s/51/3)
HA-203349	500 µL	Gastight	1750	FN	(22s/51/3)
HA-203081	1 mL	Gastight	1001	LTN	(22s/51/3)
HA-203083	2.5 mL	Gastight	1002	LTN	(22s/51/3)
HA-203085	5 mL	Gastight	1002	LTN	(22s/51/3)

## Agilent ProStar 410 Autosampler Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-62161-01	25 µL	Gastight	1702	ChemSeal (C, 1/4"-28)	NN
HA-54658-01	100 µL	Gastight	1710	ChemSeal (C, 1/4"-28)	NN
HA-54659-01	250 µL	Gastight	1725	ChemSeal (C, 1/4"-28)	NN
HA-54660-01	500 µL	Gastight	1750	ChemSeal (C, 1/4"-28)	NN
HA-54661-01	1 mL	Gastight	1001	ChemSeal (C, 1/4"-28)	NN
HA-54662-01	2.5 mL	Gastight	1001	ChemSeal (C, 1/4"-28)	NN

## CTC/LEAP PAL HPLC Autosampler Syringes

### CTC LEAP A200S Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-203560	10 µL	Gastight	1701	N	(22s/51/3)
HA-203566	100 µL	Gastight	1710	N	(22s/51/3)

# HPLC Autosampler Syringes



## PAL LC HTC, HTS, and HTX Autosamplers: S-Line Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-67444-01	10 µL	Gastight	1701	N	(22s/51/3)
HA-67446-01	25 µL	Gastight	1702	N	(22s/51/3)
HA-67450-01	50 µL	Gastight	1705	N	(22/51/3)
HA-67452-01	100 µL	Gastight	1705	N	(22s/51/3)
HA-67442-01	250 µL	Gastight	1705	N	(22/51/3)
HA-67448-01	500 µL	Gastight	1750	N	(22/51/3)

## PAL LC HTC, HTS, and HTX Autosamplers: C-Line Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-203073	10 µL	Microliter	701	FN	(22s/51/3)
HA-203194	10 µL	Gastight	1701	FN (no Glue)	(22s/51/3)
HA-203075	25 µL	Gastight	1702	FN (no Glue)	(22s/51/3)
HA-203274	25 µL	Gastight	1702	N	(22s/51/3)
HA-202668	100 µL	Gastight	1710	RN	NN
HA-203077	100 µL	Gastight	1710	FN (no Glue)	(22s/51/3)
HA-203235	100 µL	Gastight	1710	N	(22/51/3)
HA-203079	250 µL	Gastight	1725	FN (no Glue)	(22/51/3)
HA-203349	500 µL	Gastight	1750	FN (no Glue)	(22/51/3)
HA-203081	1 mL	Gastight	1001	N	(22/51/3)
HA-203083	2.5 mL	Gastight	1002	N	(22/51/3)
HA-203085	5 mL	Gastight	1005	N	(22/51/3)

## PAL LC HTC, HTS, and HTX Autosamplers: X-Type Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-204475	25 µL	Gastight	1702	FN (no Glue)	(22s/51/3)
HA-204379	50 µL	Gastight	1705	FN (no Glue)	(22s/51/3)
HA-204400	100 µL	Gastight	1710	FN (no Glue)	(22/51/3)
HA-204452	100 µL	Gastight	1710	FN (no Glue)	(22s/51/3)

## Syringes for Spark Holland HPLC Autosamplers

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-62161-01	25 µL	Gastight	1702	ChemSeal (C, 1/4"-28)	NN
HA-54658-01	100 µL	Gastight	1710	ChemSeal (C, 1/4"-28)	NN
HA-54659-01	250 µL	Gastight	1725	ChemSeal (C, 1/4"-28)	NN
HA-54660-01	500 µL	Gastight	1750	ChemSeal (C, 1/4"-28)	NN
HA-54661-01	1 mL	Gastight	1001	ChemSeal (C, 1/4"-28)	NN
HA-54662-01	2.5 mL	Gastight	1002	ChemSeal (C, 1/4"-28)	NN

## Syringes for Shimadzu HPLC Autosamplers



### Shimadzu SIL-6A Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-7656-01	100 µL	Gastight	1710	RN	NN



# HPLC Autosampler Syringes

## Shimadzu SIL 10-AF and SIL 10-AP Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-81260	500 µL	Gastight	1750	ChemSeal (C, 1/4"-28)	NN
HA-81460	2.5 mL	Gastight	1002	ChemSeal (C, 1/4"-28)	NN

## Syringes for Antec HPLC Autosamplers

### AS 100 Syringes & AS 110 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-62161-01	25 µL	Gastight	1702	ChemSeal (C, 1/4"-28)	NN
HA-54658-01	100 µL	Gastight	1710	ChemSeal (C, 1/4"-28)	NN
HA-54659-01	250 µL	Gastight	1725	ChemSeal (C, 1/4"-28)	NN
HA-54660-01	500 µL	Gastight	1750	ChemSeal (C, 1/4"-28)	NN
HA-54661-01	1 mL	Gastight	1001	ChemSeal (C, 1/4"-28)	NN
HA-54662-01	2.5 mL	Gastight	1002	ChemSeal (C, 1/4"-28)	NN

## Syringes for Spectra Physics ThermoFinnigan HPLC Autosamplers



### ThermoFinnigan SP8780, SP8875, and SP8880 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-202192	500 µL	Gastight	1750	ChemSeal (C, 1/4"-28)	NN
HA-81460	2.5 mL	Gastight	1002	ChemSeal (C, 1/4"-28)	NN

### ThermoFinnigan AS100, AS1000, AS3000, and AS3500 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-202145	250 µL	Gastight	1725	ChemSeal (C, 1/4"-28)	NN
HA-202192	500 µL	Gastight	1750	ChemSeal (C, 1/4"-28)	NN
HA-81360	1 mL	Gastight	1001	ChemSeal (C, 1/4"-28)	NN
HA-81460	2.5 mL	Gastight	1002	ChemSeal (C, 1/4"-28)	NN

## Syringes for Beckman Coulter HPLC Autosamplers

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-62161-01	25 µL	Gastight	1702	ChemSeal (C, 1/4"-28)	NN
HA-54658-01	100 µL	Gastight	1710	ChemSeal (C, 1/4"-28)	NN
HA-54659-01	250 µL	Gastight	1725	ChemSeal (C, 1/4"-28)	NN
HA-54660-01	500 µL	Gastight	1750	ChemSeal (C, 1/4"-28)	NN
HA-54661-01	1 mL	Gastight	1001	ChemSeal (C, 1/4"-28)	NN
HA-54662-01	2.5 mL	Gastight	1002	ChemSeal (C, 1/4"-28)	NN

## Syringes for Hitachi HPLC Autosamplers

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-0160310	500 µL	Gastight	1750	Special	NN



# HPLC Autosampler Syringes



## Syringes for Waters HPLC Autosamplers

### Waters 2777 Sample Manager

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-67444-01	10 µL	Gastight	1701	N	(22s/51/3)
HA-203073	10 µL	Microliter	701	FN	(22s/51/3)
HA-203194	10 µL	Gastight	1701	FN	(22s/51/3)
HA-67446-01	25 µL	Gastight	1702	N	(22s/51/3)
HA-203075	25 µL	Gastight	1702	FN	(22s/51/3)
HA-203274	25 µL	Gastight	1702	FN	(22s/51/3)
HA-204475	25 µL	Gastight	1702	FN (no Glue)	(22s/51/3)
HA-67450-01	50 µL	Gastight	1705	N	(22/51/3)
HA-204379	50 µL	Gastight	1705	FN	(22s/51/3)
HA-67452-01	100 µL	Gastight	1710	N	(22s/51/3)
HA-202668	100 µL	Gastight	1710	RN	NN
HA-203077	100 µL	Gastight	1710	FN	(22s/51/3)
HA-203235	100 µL	Gastight	1710	FN	(22/51/3)
HA-204400	100 µL	Gastight	1710	FN (no Glue)	(22/51/3)
HA-204452	100 µL	Gastight	1710	FN (no Glue)	(22s/51/3)
HA-67442-01	250 µL	Gastight	1725	N	(22/51/3)
HA-203079	250 µL	Gastight	1725	FN	(22/51/3)
HA-67448-01	500 µL	Gastight	1750	N	(22/51/3)
HA-203349	500 µL	Gastight	1750	FN	(22/51/3)
HA-203081	1 mL	Gastight	1001	LTN	(22/51/3)
HA-203083	2.5 mL	Gastight	1002	LTN	(22/51/3)
HA-203085	5 mL	Gastight	1005	LTN	(22/51/3)

### Waters 2707 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-62161-01	25 µL	Gastight	1702SH	ChemSeal (C, 1/4"-28)	NN
HA-54658-01	100 µL	Gastight	1710	ChemSeal (C, 1/4"-28)	NN
HA-54659-01	250 µL	Gastight	1725	ChemSeal (C, 1/4"-28)	NN
HA-54660-01	500 µL	Gastight	1750	ChemSeal (C, 1/4"-28)	NN
HA-54661-01	1 mL	Gastight	1001	ChemSeal (C, 1/4"-28)	NN
HA-54662-01	2.5 mL	Gastight	1002	ChemSeal (C, 1/4"-28)	NN



### Waters 717 plus and WISP Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-80020	25 µL	Gastight	1702CX	ChemSeal (C, 1/4"-28)	NN
HA-80024	250 µL	Gastight	1725CX	ChemSeal (C, 1/4"-28)	NN



# HPLC Autosampler Syringes

## Syringes for Dionex HPLC Autosamplers

### UltiMate 3000 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-67444-01	10 µL	Gastight	1701	N	(22s/51/3)
HA-203073	10 µL	Microliter	701	FN	(22s/51/3)
HA-203194	10 µL	Gastight	1701	FN	(22s/51/3)
HA-67446-01	25 µL	Gastight	1702	N	(22s/51/3)
HA-203075	25 µL	Gastight	1702	FN	(22s/51/3)
HA-203274	25 µL	Gastight	1702	FN	(22s/51/3)
HA-204475	25 µL	Gastight	1702	FN (no Glue)	(22s/51/3)
HA-67450-01	50 µL	Gastight	1705	N	(22s/51/3)
HA-204379	50 µL	Gastight	1705	FN	(22s/51/3)
HA-67452-01	100 µL	Gastight	1710	N	(22s/51/3)
HA-202668	100 µL	Gastight	1710	RN	NN
HA-203077	100 µL	Gastight	1710	FN	(22s/51/3)
HA-203235	100 µL	Gastight	1710	FN	(22s/51/3)
HA-204400	100 µL	Gastight	1710	FN	(22s/51/3)
HA-204452	100 µL	Gastight	1710	FN	(22s/51/3)
HA-67442-01	250 µL	Gastight	1725	N	(22s/51/3)
HA-203079	250 µL	Gastight	1725	FN (no Glue)	(22s/51/3)
HA-67448-01	500 µL	Gastight	1750	N	(22s/51/3)
HA-203349	500 µL	Gastight	1750	FN	(22s/51/3)
HA-203081	1 mL	Gastight	1001	LTN	(22s/51/3)
HA-203083	2.5 mL	Gastight	1002	LTN	(22s/51/3)
HA-203085	5 mL	Gastight	1005	LTN	(22s/51/3)

### Dionex Gina ASI 100 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-7654-01	25 µL	Gastight	1702	RN	NN
HA-7657-01	250 µL	Gastight	1725	RN	NN

### ESA Model 542, 540 & ESA Model 540 MT Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-62161-01	25 µL	Gastight	1702	ChemSeal (C, 1/4"-28)	NN
HA-54658-01	100 µL	Gastight	1701	ChemSeal (C, 1/4"-28)	NN
HA-54659-01	250 µL	Gastight	1725	ChemSeal (C, 1/4"-28)	NN
HA-54660-01	500 µL	Gastight	1750	ChemSeal (C, 1/4"-28)	NN
HA-54661-01	1 mL	Gastight	1001	ChemSeal (C, 1/4"-28)	NN
HA-54662-01	2.5 mL	Gastight	1002	ChemSeal (C, 1/4"-28)	NN

# HPLC Autosampler Syringes



## Syringes for Bruker Varian HPLC Autosamplers

### ProStar 410, 420, 430 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-62161-01	25 µL	Gastight	1702	ChemSeal (C, 1/4"-28)	NN
HA-54658-01	100 µL	Gastight	1701	ChemSeal (C, 1/4"-28)	NN
HA-54659-01	250 µL	Gastight	1725	ChemSeal (C, 1/4"-28)	NN
HA-54660-01	500 µL	Gastight	1750	ChemSeal (C, 1/4"-28)	NN
HA-54661-01	1 mL	Gastight	1001	ChemSeal (C, 1/4"-28)	NN
HA-54662-01	2.5 mL	Gastight	1002	ChemSeal (C, 1/4"-28)	NN

### Varian 9100 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-0159902	100 µL	Gastight	1710	ChemSeal (C, 1/4"-28)	NN

## Syringes for Grace Alltech HPLC Autosamplers

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-62161-01	25 µL	Gastight	1702	ChemSeal (C, 1/4"-28)	NN
HA-54658-01	100 µL	Gastight	1701	ChemSeal (C, 1/4"-28)	NN
HA-54659-01	250 µL	Gastight	1725	ChemSeal (C, 1/4"-28)	NN
HA-54660-01	500 µL	Gastight	1750	ChemSeal (C, 1/4"-28)	NN
HA-54661-01	1 mL	Gastight	1001	ChemSeal (C, 1/4"-28)	NN
HA-54662-01	2.5 mL	Gastight	1002	ChemSeal (C, 1/4"-28)	NN

## Syringes for Kontron HPLC Autosamplers

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-201050	100 µL	Gastight	1710	AccuDil® (AD)	NN

## Syringes for Perkin Elmer HPLC Autosamplers



### Series 225, Flexar FX 10 & FX 15 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-62161-01	25 µL	Gastight	1702	ChemSeal (C, 1/4"-28)	NN
HA-54658-01	100 µL	Gastight	1701	ChemSeal (C, 1/4"-28)	NN
HA-54659-01	250 µL	Gastight	1725	ChemSeal (C, 1/4"-28)	NN
HA-54660-01	500 µL	Gastight	1750	ChemSeal (C, 1/4"-28)	NN
HA-54661-01	1 mL	Gastight	1001	ChemSeal (C, 1/4"-28)	NN
HA-54662-01	2.5 mL	Gastight	1002	ChemSeal (C, 1/4"-28)	NN

### Series 200 Syringes

Cat.No	Volume	Syringe Type	Syringe Series	Termination	Needle
HA-80962	50 µL	Gastight	1705	ChemSeal (C, 1/4"-28)	NN
HA-81162	250 µL	Gastight	1725	ChemSeal (C, 1/4"-28)	NN
HA-81262	500 µL	Gastight	1750	ChemSeal (C, 1/4"-28)	NN
HA-81360	1 mL	Gastight	1001	ChemSeal (C, 1/4"-28)	NN
HA-81460	2.5 mL	Gastight	1002	ChemSeal (C, 1/4"-28)	NN



# Syringe Needles

## Removable Needles

- Convenient SIX PACKS
- For use with RN-style syringes and connectors
- 304 stainless steel (sst.) needle
- Standard needle length: 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 <sup>1)</sup>	Custom <sup>2)</sup> Point Styles 2, 3, 4, AS
	33	-	HA-7762-06	-	-
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 <sup>1)</sup>	Custom <sup>2)</sup> Point Styles 2, 3, 4, AS
	26s	HA-7758-02	HA-7768-01	HA-7784-07	HA-7731-02
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 <sup>1)</sup>	Custom <sup>2)</sup> Point Styles 2, 3, 4, AS
	26s	HA-7779-02	HA-7780-01	HA-7784-03	HA-7732-04
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 length, and whether electro-tapered (Point style 5) or not

2) Please specify length, point style, and whether electro-tapered or not

## 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

## 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 length: 51 mm

### Metal Hub (N)

All needles sold in 6 packs.



Metal Hub Needles

Gauge	Tubing No Hub	   				Custom N. <sup>2)</sup>
		Point Style 2	Point Style 3	Point Style 5	Custom Needles <sup>1)</sup>	Point Styles 2, 3, 4, AS
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 length, and whether electro-tapered (Point style 5) or not

2) Please specify length, point style, and whether electro-tapered or not







# Syringe Needles

## Hel-F™ Hub (KF)

All needles sold in 6 packs.



Hel-F™ Hub (KF)

Gauge					Custom <sup>2)</sup> Needles. 2, 3, 4, AS
	Point Style 2	Point Style 3	Point Style 5	Custom Needles <sup>1)</sup>	
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 length, and whether electro-tapered (Point style 5) or not

2) Please specify length, point style, and whether electro-tapered or not

# 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

