

SETonic

Microsyringes

2019

made
in
Germany



www.setonic.com

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SETonic Microsyringes

L-MARK® Syringes

The L-MARK® Syringe has been developed as a complete line of syringes that mitigate many of the problems associated with traditional syringe products.

This industry leading syringe technology was the first of its kind designed with a plunger guide to maintain optimal plunger alignment to lengthen the plunger life to match the demands of high throughput labs. The L-MARK® Syringe is offered with a choice of either a polyethylene or a PTFE plunger tip. L-MARK® plungers are manufactured with titanium for added longevity. In addition, the needle setting which is welded to a ferrule embedded in the syringe barrel is protected by a PTFE barrier for reduced exposure of adhesive to the samples drawn up by the syringe.

Our design goal was to develop a syringe that increased the lifetime performance of syringes up to 10 times longer than standard syringes while significantly reducing or eliminating carryover. We believe the L-Mark® Syringe product line has accomplished just that.

L-MARK® GOLD

The L-MARK® GOLD is manufactured with the same precise requirements as the standard L-MARK® and includes a chemically inert coated needle. In many laboratories this syringe achieved the lowest carry-over results compared to any syringe on the market. The syringe maintains all the performance results of the standard or non-coated needle L-MARK® with the best carry-over performance. L-MARK® products are stocked and ready to ship the same day.

SETonic Tech Tip:

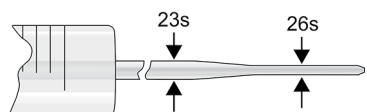


All pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.

Technical Syringe Information

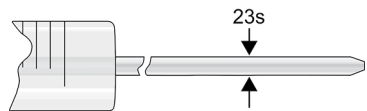
Gauge Type

23s-26s Dual Gauge Tapered Needle



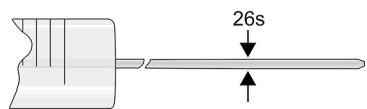
- ⇒ Split/splitless or on-column injections
- ⇒ Versatility without sacrificing durability
- ⇒ More solid needle than regular 26s
- ⇒ Minimizes septum abrasion

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

Gauge Index Table

Gauge	Nominal OD mm*	Nominal ID mm*	Wall Thickness mm*	Volume µL/Inch
26s	0.474	0.127	0.35	0.322
26	0.464	0.260	0.20	1.349
25s	0.515	0.153	0.36	0.464
25	0.515	0.260	0.25	1.349
24	0.566	0.311	0.25	1.930
23s	0.642	0.116	0.53	0.268
23	0.642	0.337	0.30	2.266
22s	0.718	0.168	0.55	0.563
22	0.718	0.413	0.30	3.403
21	0.819	0.514	0.30	5.271
20	0.908	0.603	0.30	7.255
19	1.067	0.686	0.38	9.389

*mm are nominal

Plunger Tips

- PE-HD - with better durability than virginal PTFE, when working with saline solutions
- PTFE - gas-tight sealing of the plunger tip, for most solvents and chemicals
- PTFE NUB - PTFE compound with highest durability and chemical resistant combined with low electrostatic effects
- SS-Gold coated* - Gold coated stainless steel, developed for use with aggressive solvents (e.g. strong acids)

*regular stainless steel plunger syringes are available as gold coated version on request

Syringe Terminations

FN - Fixed Needle



LT - Luer Tip (with Fixed Needle)



TLL/TLL-X - Teflon (PTFE) Luer Lock



RN - Removable Needle



LT - Luer Tip (without Needle)



* for use with NLL Luer Needles

1/4"-28 UNF



Needle Tip Styles

Type AS and c



Special conical needle recommended for septum penetration (Autosampler Type).

SGE Hamilton

1 AS

Type a



Beveled needle is recommended for life science applications.

2 4

Type b



Blunt needle for use with HPLC-Injection valves and for sample pipetting.

3 3

Type d



Conical needle with side port is recommended for penetration of septa, thin-gauged vinyls and plastics without coring (Headspace GC).

5 5

Microsyringes for Agilent GC Autosampler

L-MARK® Syringes for Agilent GC Autosampler - Removable Needle



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Microsyringes 0.5µl-10µl - Needle Tip Style AS, Needle Length 42mm

Part No.	Volume	Plunger Type	Needle	OD (Gauge)	Qty.	Agilent	ILS
3030151	0.5µl	SS (In Needle)	RN	0.64mm (G23s)	ea.	5188-5246	2204052
3030152	1µl	SS (In Needle)	RN	0.64mm (G23s)	ea.	5188-5247	2204103
3030129	5µl	SS	RN	0.47mm (G26s)	ea.	5182-0834	2104307
3030130	5µl	SS	RN	0.64-0.47mm (G23s-G26s)	ea.	5182-0835	2104308
3030138	10µl	SS	RN	0.64mm (G23s)	ea.	5181-8806	2104409
3030137	10µl	SS	RN	0.64-0.47mm (G23s-G26s)	ea.	5181-3321	2104408
3030166	10µl	PTFE	RN	0.64mm (G23s)	ea.	5181-8813	2604409
3030165	10µl	PTFE	RN	0.64-0.47mm (G23s-G26s)	ea.	5181-3356	2604408

L-MARK® Syringes for Agilent GC Autosampler - Fixed Needle



Microsyringes 5µl-100µl - Needle Tip Style AS, Needle Length 42mm

Part No.	Volume	Plunger Type	Needle	OD (Gauge)	Qty.	Agilent	ILS
3030128	5µl	SS	FN	0.64mm (G23s)	ea.	9301-0892	2104305
3030133	5µl	SS	FN	0.64mm (G23s)	pk.6	5182-0875	2104315
3030127	5µl	SS	FN	0.64-0.47mm (G23s-G26s)	ea.	5181-1273	2104304
3030132	5µl	SS	FN	0.64-0.47mm (G23s-G26s)	pk.6	5181-8810	2104314
3030126	5µl	SS	FN	0.47mm (G26s)	ea.	9301-0891	2104303
3030131	5µl	SS	FN	0.47mm (G26s)	pk.6	5183-4728	2104313
3030136	10µl	SS	FN	0.64mm (G23s)	ea.	9301-0713	2104405
3030141	10µl	SS	FN	0.64mm (G23s)	pk.6	9301-0725	2104415
3030135	10µl	SS	FN	0.64-0.47mm (G23s-G26s)	ea.	5181-1267	2104404
3030140	10µl	SS	FN	0.64-0.47mm (G23s-G26s)	pk.6	5181-3360	2104414
3030134	10µl	SS	FN	0.47mm (G26s)	ea.	9301-0714	2104403
3030139	10µl	SS	FN	0.47mm (G26s)	pk.6	5183-4729	2104413
3030163	10µl	PTFE	FN	0.64mm (G23s)	ea.	5181-8809	2604403
3030167	10µl	PTFE	FN	0.64mm (G23s)	pk.6	5183-4730	2604413
3030164	10µl	PTFE	FN	0.64-0.47mm (G23s-G26s)	ea.	5181-3354	2604404
3030168	10µl	PTFE	FN	0.64-0.47mm (G23s-G26s)	pk.6	5181-3361	2604414
3030169	25µl	PTFE	FN	0.64mm (G23s)	ea.	5183-0316	2604505
3030174	25µl	PTFE	FN	0.64-0.47mm (G23s-G26s)	ea.	5183-0316	2604504
3030170	50µl	PTFE	FN	0.64mm (G23s)	ea.	5183-0318	2604605
3030175	50µl	PTFE	FN	0.64-0.47mm (G23s-G26s)	ea.	5183-0314	2604604
3030171	100µl	PTFE	FN	0.64mm (G23s)	ea.	5183-2058	2604705
3030176	100µl	PTFE	FN	0.64-0.47mm (G23s-G26s)	ea.	5183-2058	2604704

Syringes 5µl-10µl - Needle Tip Style a, Needle Length 42mm

Part No.	Volume	Plunger Type	Needle	OD (Gauge)	Qty.	Hamilton	ILS
3031126	5µl	SS	FN	0.47mm (G26s)	ea.	87992	
3031127	5µl	SS	FN	0.64mm (G23s)	ea.	87991	
3031128	10µl	SS	FN ¹⁾	0.47mm (G26s)	ea.	80399	
3031129	10µl	PTFE	FN	0.64mm (G23s)	ea.	80398	2104410

Microsyringes for CTC PAL Autosampler

L-MARK® Syringes for CTC PALxT LC Autosampler

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Syringes 10µl-5.0ml - Needle Tip Style b, Needle Length 51mm - **Type LC**

Part No.	Volume	Plunger Type	Needle	OD (Gauge)	Qty.	Hamilton	SGE
LMK.2106424	10µl	SS	FN	0.72mm (G22s)	ea.	80365	002710
LMK.2606416	10µl	PTFE	FN	0.72mm (G22s) with stop	ea.	203194	002715
LMK.2620517	25µl	PTFE	FN	0.72mm (G22s)	ea.	203274	009384
LMK.2620517-2P	25µl	PTFE	FN	0.72mm (G22s)	pk.2	203274	009384
LMK.2620517-6P	25µl	PTFE	FN	0.72mm (G22s)	pk.6	203274	009384
LMK.2620615	50µl	PTFE	FN	0.72mm (G22)	ea.		003715
LMK.2620615-2P	50µl	PTFE	FN	0.72mm (G22)	pk.2		
LMK.2620615-6P	50µl	PTFE	FN	0.72mm (G22)	pk.6		004810
LMK.2620719	100µl	PTFE	FN	0.72mm (G22s)	ea.	203077	005715
LMK.2620719-2P	100µl	PTFE	FN	0.72mm (G22s)	pk.2	203077	005715
LMK.2620719-6P	100µl	PTFE	FN	0.72mm (G22s)	pk.6	203077	005715
LMK.2620721	100µl	PTFE	FN	0.72mm (G22)	ea.	203235	005720
LMK.2620721-2P	100µl	PTFE	FN	0.72mm (G22)	pk.2	203235	005720
LMK.2620721-6P	100µl	PTFE	FN	0.72mm (G22)	pk.6	203235	005720
LMK.2620821	250µl	PTFE	FN	0.72mm (G22s)	ea.		006330
LMK.2620908	500µl	PTFE	FN ¹⁾	0.72mm (G22)	ea.	203349	007720
LMK.2620011	1.0ml	PTFE LT	FN ²⁾	0.72mm (G22)	ea.		008120
LMK.2620054	5.0ml	PTFE LT	FN ²⁾	1.10mm (G19)	ea.		008820

1) Needle Length 56mm 2) Needle Length 57mm

L-MARK® Syringes for CTC Combi PAL GC Autosampler

Syringes 1.2µl-500µl - Needle Tip Style AS, Needle Length 51mm - **Type GC**

Part No.	Volume	Plunger Type	Needle	OD (Gauge)	Qty.	Hamilton	SGE
LMK.2220001	1.2µl	SS	FN	0.48mm (G26P)	ea.	203185	000790
LMK.2220001-6P	1.2µl	SS	FN	0.48mm (G26P)	pk.6	203185	000790
LMK.2106303	5µl	SS	FN	0.64mm (G23s)	ea.		
LMK.2106302	5µl	SS	FN	0.47mm (G26s)	ea.	203189	001980
LMK.2106403	10µl	SS	FN	0.64mm (G23s)	ea.	203361	002981
LMK.2106426	10µl	SS	FN	0.64-0.47mm (G23s-G26s)	ea.	203362	002981
LMK.2106416	10µl	SS	FN	0.47mm (G26s)	ea.	203205	002980
LMK.2106416-2P	10µl	SS	FN	0.47mm (G26s)	pk.2	203205	002980
LMK.2106416-6P	10µl	SS	FN	0.47mm (G26s)	pk.6	203205	002980
LMK.2606407	10µl	PTFE	FN	0.47mm (G26s)	ea.		002977
LMK.2606403	10µl	PTFE	FN	0.64mm (G23s)	ea.		002987
LMK.2620706	100µl	PTFE	FN	0.47mm (G26s)	ea.	203076	005700
LMK.2620706-2P	100µl	PTFE	FN	0.47mm (G26s)	pk.2	203076	005700
LMK.2620706-6P	100µl	PTFE	FN	0.47mm (G26s)	pk.6	203076	005700
LMK.2620803	250µl	PTFE	FN	0.47mm (G26)	ea.	203078	006700
LMK.2620903	500µl	PTFE	FN	0.47mm (G26)	ea.	203080	007700

SETonic Microsyringes for CTC PAL Autosampler

L-MARK® Syringes for CTC PAL 3/RTC/RSH Autosampler



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Syringes 10µl-1.0ml - Needle Tip Style AS, Needle Length 57mm - **Type GC**

Part No.	Volume	Plunger Type	Needle	OD (Gauge)	Qty.	Hamilton	SGE
LMK.2116405	10µl	SS	FN	0.64mm (G23s)	ea.	207803	002865
LMK.2116404	10µl	SS	FN	0.47mm (G26s)	ea.	207807	002865
LMK.2116406	10µl	SS	FN ¹⁾	0.47mm (G26s)	ea.		002867
LMK.2616405	10µl	PTFE	FN	0.64mm (G23s)	ea.		002862
LMK.2616404	10µl	PTFE	FN	0.47mm (G26s)	ea.		
LMK.2616703	100µl	PTFE	FN	0.47mm (G26s)	ea.	207840	005866
LMK.2616803	250µl	PTFE	FN	0.47mm (G26s)	ea.		006862
LMK.2616804	250µl	PTFE	FN ¹⁾	0.47mm (G26s)	ea.		006862
LMK.2616003	1.0ml	PTFE	FN	0.64mm (G23s)	ea.	207849	

1) Needle Length 85mm

Syringes 10µl-1.0ml - Needle Tip Style b, Needle Length 57mm - **Type LC**

Part No.	Volume	Plunger Type	Needle	OD (Gauge)	Qty.	Hamilton	SGE
LMK.2616422	10µl	PTFE	FN	0.72mm (G22s)	ea.		
LMK.2616502C	25µl	PTFE	FN	0.72mm (G22s) coated ²⁾	ea.	208304	
LMK.2616702C	100µl	PTFE	FN	0.72mm (G22s) coated ²⁾	ea.	208312	
LMK.2616704C	100µl	PTFE	FN	0.72mm (G22) coated ²⁾	ea.	208311	
LMK.2616822	250µl	PTFE	FN	0.72mm (G22s)	ea.	208304	
LMK.2616922	500µl	PTFE	FN	0.72mm (G22s)	ea.		
LMK.2616012	1.0ml	PTFE	FN	0.72mm (G22s)	ea.		

2) hydrophobic, oleophobic coated syringe needle

L-MARK® Gas-Tight Large Volume Syringes - Fixed Needle



Syringes 1.0ml-10.0ml

Part No.	Volume	Needle	OD (Gauge)	Needle Length	Point Style	Qty.	Hamilton	ILS	Agilent
3030249	1.0ml	FN	0.72mm (G22)	51mm	a	ea.	81317	2600000	
3030198	1.0ml	FN	0.72mm (G22)	56mm	b	ea.			
3030248	1.0ml	FN	0.64mm (G23)	51mm	a	ea.		2600003	
3030186*	1.0ml	FN	0.64mm (G23)	51mm	d	ea.	203082	2620002	
3030250	2.5ml	FN	0.72mm (G22s)	51mm	a	ea.		2600020	
3030154	2.5ml	FN	0.72mm (G22)	51mm	a	ea.			5182-9642
3030199	2.5ml	FN	0.72mm (G22)	56mm	b	ea.		2620030	
3030187*	2.5ml	FN	0.64mm (G23)	51mm	d	ea.			
3030251	5.0ml	FN	0.72mm (G22s)	51mm	a	ea.		2600040	
3030155	5.0ml	FN	0.72mm (G22)	51mm	a	ea.	81517		5182-9638
3030200	5.0ml	FN	0.72mm (G22)	56mm	b	ea.		2620056	
3030188*	5.0ml	FN	0.64mm (G23)	56mm	d	ea.		2620050	
3030252	10.0ml	FN	0.72mm (G22s)	51mm	a	ea.		2600060	
3030156	10.0ml	FN	0.72mm (G22)	51mm	a	ea.			

* High temperature syringes up to 120°C for Headspace analysis

SETonic Microsyringes for PAL Autosampler

L-MARK® Syringes for CTC PAL 3/RTC DLW



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LMK.2620740 with deformation resistant PCTFE Insert and PTFE NUB Seal

SETonic proudly introduces syringes for use in the CTC Autosampler with the Dynamic Load & Wash option (DLW). The L-MARK® DLW Syringes have been optimized to provide superior performance during instrument operation and address issues experienced with competitive products including syringe leaking, carryover and plunger wear.

Part No.	Volume	Plunger Type	Needle	Feature	Qty.	Reference
LMK.2620735	100µl	PTFE	w/o		ea.	100.SYRCDLW100R
LMK.2620735-BL	100µl	PTFE NUB	w/o	Black Seal	ea.	
LMK.2620740	100µl	PTFE	w/o	PCTFE Insert	ea.	
LMK.2620835-BL	250µl	PTFE NUB	w/o	Black Seal	ea.	
LMK.2620935-BL	500µl	PTFE NUB	w/o	Black Seal	ea.	
LMK.2620080-BL	1.0ml	PTFE NUB	w/o	Black Seal	ea.	

Replacement Plunger for DLW Syringes

Part No.	Volume	Plunger Type	Qty.
LMK.2636735	100µl	PTFE	pk.6
LMK.2636735-BL	100µl	PTFE NUB	pk.6
LMK.2636835-BL	250µl	PTFE NUB	pk.6
LMK.2636935-BL	500µl	PTFE NUB	pk.6
LMK.2636086-BL	1.0ml	PTFE NUB	pk.6

SETonic Tech Tip:

A major instrument company recently compared the L-MARK® DLW Syringe (LMK.2620740) against the leading competitive syringe. Their findings were significant. Researchers noted the competitive syringe required retightening between 400 and 500 injections while the L-MARK DLW syringe required no operator intervention for more than 6.400 injections. Additionally most LMK.2620740 gain an additional 20-25% life on their syringes. Discover what many customers have already learned: **the L-MARK® DLW provides longer life, less leaks and less intervention.**

SETonic PAL System Consumables

Analytical laboratory customers demand reliability and availability for the products complimenting their high throughput PAL autosampling systems. SETonic now offers a full host of consumable and small parts. Our partner LEAP PAL Parts has been in the lab instrumentation and liquid handling business for over 20 years. If you are currently working with a CTC/LEAP PAL Autosampler, we offer a complete line of small parts and consumables to meet your needs. Our products are of the highest quality from premier manufacturers in our industry. We are confident SETonic GmbH products, services and prices will continue to exceed your expectations.

SETonic Microsyringes for Most Common GC Autosampler Syringes for use with Perkin Elmer AutoSystem + Clarus Equipment



Part No.	Volume	Needle	OD (Gauge)	Needle Length	Point Style	Qty.	ILS	Hamilton	SGE
3030865 ¹⁾	0.5µl	ZDV	0.47mm (G26s)	70mm	AS	ea.	2208051	86275	000475
3030608 ¹⁾	5µl	ZDV	0.64mm (G23s)	70mm	AS	ea.	2208053	86275	000478
3030491	5µl	FN	0.47mm (G26s)	70mm	AS	ea.	2108302	88040	001953
3030492	5µl	FN	0.64mm (G23s)	70mm	AS	ea.	2108303	88035	001954
3030493 ²⁾	5µl	FN	0.47mm (G26s)	70mm	AS	ea.	2608302		001955
3030494 ²⁾	5µl	FN	0.64mm (G23s)	70mm	AS	ea.	2608303		001957

¹⁾ ZDV - Zero Dead Volume - Plunger in Needle

²⁾ Gastight, with PTFE Plunger Seal

Syringes for Shimadzu AOC 14/17/20



Stainless Steel Plunger 5-10µl

Part No.	Volume	Needle	OD (Gauge)	Needle Length	Point Style	Qty.	ILS	Reference
3030406	5µl	FN	0.47mm (G26s)	42mm	a	ea.	2105301	
3030407	5µl	FN	0.64mm (G23)	42mm	a	ea.	2105302	
3030408	10µl	FN	0.47mm (G26s)	42mm	a	ea.	2105401	
3030409	10µl	FN	0.64mm (G23)	42mm	a	ea.	2105402	
3030410	5µl	FN	0.47mm (G26s)	42mm	AS	ea.	2105303	001987
3030411	5µl	FN	0.64mm (G23)	42mm	AS	ea.	2105304	001988
3030412	10µl	FN	0.47mm (G26s)	42mm	AS	ea.	2105403	
3030413	10µl	FN	0.64mm (G23)	42mm	AS	ea.	2105404	202643
3030414	5µl	RN	0.47mm (G26s)	42mm	a	ea.	2105307	
3030415	5µl	RN	0.64mm (G23)	42mm	a	ea.	2105308	
3030416	10µl	RN	0.47mm (G26s)	42mm	a	ea.	2105407	
3030417	10µl	RN	0.64mm (G23)	42mm	a	ea.	2105408	
3030418	10µl	RN	0.47mm (G26s)	42mm	AS	ea.	2105409	002897
3030419	10µl	RN	0.64mm (G23)	42mm	AS	ea.	2105410	002898



Also available as 6 Packs. For more info visit www.setonic.com or use the qr-code.

Syringes for On-Column Injection



Part No.	Volume	Needle	OD (Gauge)	Needle Length	Point Style	Qty.	ILS
3030143	10µl	RN	FS 0.23 ¹⁾	100mm	b	ea.	2142404
3030144	10µl	RN	0.23(G32)	100mm	45°	ea.	2142412

¹⁾ Fused Silica Needle

SETonic Microsyringes for Most Common Autosampler

Syringes for Gerstel MPS TriStar ALEX/TDU/DHS Universal Syringe Holder



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Fixed Needle

Part No.	Volume	Plunger	OD (Gauge)	Needle Length	Point Style	Qty.	ILS	Gerstel
3030699	5µl	SS	0.64mm (G23s)	52.2mm	AS	ea.		022000-000-00
3030698	10µl	PTFE	0.64mm (G23s)	52.2mm	AS	ea.	2606432	022000-051-00
3030572	10µl	SS	0.64mm (G23s)	51.5mm	AS	ea.		022000-050-09

Removable Needle

Part No.	Volume	Plunger	OD (Gauge)	Needle Length	Point Style	Qty.	ILS	Gerstel
3030890	5µl	PTFE	0.64mm (G23s)	51.5mm	AS	ea.		022000-001-00
3030402	10µl	PTFE	0.64mm (G23s)	51.5mm	AS	ea.		022000-053-00
3030891	100µl	PTFE	0.64mm (G23)	52.0mm	AS	ea.		022000-200-00
3030892	250µl	PTFE	0.64mm (G23)	52.0mm	AS	ea.		022000-250-00
3030893	500µl	PTFE	0.64mm (G23)	52.0mm	AS	ea.		022000-251-00
3030894	1.0ml	PTFE	0.64mm (G23)	53.5mm	AS	ea.	2612009	022000-300-00
3030895	1.0ml	PTFE	0.64mm (G23)	57.0mm	d	ea.		022001-300-00

Replacement Needles - for Gerstel Syringes only



Part No.	Volume	OD (Gauge)	Needle Length	Point Style	Qty.
3050254	5µl	0.64mm (G23s)	51.5mm	AS	pk.3
3050077	10µl	0.64mm (G23s)	51.5mm	AS	pk.3
3050255	10µl	0.47mm (G26s) On Column	51.5mm	AS	pk.3
3050256	25µl-10.0ml	0.64mm (G23)	51.5mm	AS	pk.3
3050246	25µl-10.0ml	0.72mm (G22)	51.0mm	AS	pk.3
3050257	25µl-10.0ml	0.64mm (G23)	53.5mm	AS	pk.3
3050258	25µl-10.0ml	0.72mm (G22)	53.5mm	AS	pk.3

Check qr-code for
TriStar MPS Robotic Syringes:



SETonic Microsyringes for manual use

EH - Syringes with Extended Handle



Part No.	Volume	Needle	OD (Gauge)	Needle Length	Point Style	Qty.	ILS	Hamilton
3030004	5µl	RN	0.47mm (G26s)	51mm	a	ea.	2500305	84851
3030005	10µl	RN	0.47mm (G26s)	51mm	a	ea.	2500405	84853
3030799	10µl	RNW	0.50mm (G25s)	50mm	b	ea.		
3030006	25µl	RN	0.72mm (G22s)	51mm	a	ea.		84855

SETonic Microsyringes for manual use

Gas-Tight Syringes with PTFE Plunger Seal

Fixed Needle



Syringes 5µl-500µl - Needle Tip Style a*, Needle Length 51mm

Part No.	Volume	Plunger Type	Needle	OD (Gauge)	Qty.	ILS	Hamilton
3030241	5µl	PTFE	FN	0.47mm (G26s)	ea.	2600301	
3030242	10µl	PTFE	FN	0.47mm (G26s)	ea.	2600401	80000
3030243	25µl	PTFE	FN	0.72mm (G22s)	ea.	2600501	80200
3030244	50µl	PTFE	FN	0.72mm (G22s)	ea.	2600601	80900
3030245	100µl	PTFE	FN	0.72mm (G22s)	ea.	2600701	81000
3030246	250µl	PTFE	FN	0.72mm (G22)	ea.	2600801	81100
3030247	500µl	PTFE	FN	0.72mm (G22)	ea.	2600901	81217



* Also available in other pointstyles. For more info visit www.setonic.com or use the qr-code.

Removable Needle



Microsyringes 5µl-10.0ml - Needle Tip Style a*, Needle Length 51mm

Part No.	Volume	Plunger Type	Needle	OD (Gauge)	Qty.	ILS	Hamilton
3030544	5µl	PTFE	RN	0.47mm (G26s)	ea.	2600305	
3030676	10µl	PTFE	RN	0.47mm (G26s)	ea.	2100405	80030
3030604	25µl	PTFE	RN	0.72mm (G22s)	ea.	2600505	80230
3030605	50µl	PTFE	RN	0.72mm (G22s)	ea.	2600605	80930
3030606	100µl	PTFE	RN	0.72mm (G22s)	ea.	2600705	81030
3030366	250µl	PTFE	RN	0.72mm (G22s)	ea.	2600805	81130
3030607	500µl	PTFE	RN	0.72mm (G22)	ea.	2600905	81230
3030368	1.0ml	PTFE	RN	0.72mm (G22)	ea.	2600005	81330
3030672	2.5ml	PTFE	RN	0.72mm (G22)	ea.	2600025	
3030673	5.0ml	PTFE	RN	0.72mm (G22)	ea.	2600045	81530
3030674	10.0ml	PTFE	RN	0.72mm (G22)	ea.	2600065	81630



* Also available in other pointstyles. For more info visit www.setonic.com or use the qr-code.

Replacement Needles - Needle Tip Style a*, Needle Length 51mm



Part No.	for Syringe Volume	OD (Gauge)	Qty.
3050072	5µl	0.47mm (G26s)	pk.3
3050022	10µl	0.47mm (G26s)	pk.3
3050179	25µl-10ml	0.72mm (G22)	pk.3
3050036	25µl-10ml	0.72mm (G22s)	pk.3

* Also available in other pointstyles.

SETonic Microsyringes for manual use

Syringes with Stainless Steel Plunger

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Syringes Fixed Needle 5µl-500µl - Needle Tip Style a*, Needle Length 51mm

Part No.	Volume	Plunger Type	Needle	OD (Gauge)	Qty.	ILS	Hamilton
3030205	5µl	SS	FN	0.47mm (G26s)	ea.	2100301	87900
3030206	10µl	SS	FN	0.47mm (G26s)	ea.	2100401	80300
3030207	25µl	SS	FN	0.72mm (G22s)	ea.	2100501	80400
3030208	50µl	SS	FN	0.72mm (G22s)	ea.	2100601	80500
3030209	100µl	SS	FN	0.72mm (G22s)	ea.	2100701	80600
3030210	250µl	SS	FN	0.72mm (G22)	ea.	2100801	80700
3030211	500µl	SS	FN	0.72mm (G22)	ea.	2100901	



* Also available in other pointstyles. For more info visit www.setonic.com or use the qr-code.



Syringes Removable Needle 5µl-500µl - Needle Tip Style a*, Needle Length 51mm

Part No.	Volume	Plunger Type	Needle	OD (Gauge)	Qty.	ILS	Hamilton
3030389	5µl	SS	RN	0.47mm (G26s)	ea.	2100305	87930
3030298	10µl	SS	RN	0.47mm (G26s)	ea.	2100405	80330
3030299	25µl	SS	RN	0.72mm (G22s)	ea.	2100505	80430
3030300	50µl	SS	RN	0.72mm (G22s)	ea.	2100605	80530
3030301	100µl	SS	RN	0.72mm (G22s)	ea.	2100705	80630
3030302	250µl	SS	RN	0.72mm (G22)	ea.	2100805	80730
3030303	500µl	SS	RN	0.72mm (G22)	ea.	2100905	80830



* Also available in other pointstyles. For more info visit www.setonic.com or use the qr-code.

Replacement Needles - Needle Tip Style a*, Needle Length 51mm



Part No.	for Syringe Volume	OD (Gauge)	Qty.
3050072	5µl	0.47mm (G26s)	pk.3
3050022	10µl	0.47mm (G26s)	pk.3
3050179	25µl-10ml	0.72mm (G22)	pk.3
3050036	25µl-10ml	0.72mm (G22s)	pk.3

* Also available in other pointstyles.

ZDV - Zero Dead Volume - Plunger In Needle Syringes

Part No.	Volume	Needle	OD (Gauge)	Needle Length	Point Style	Qty.	ILS	Agilent
3030151 ^{*)}	0.5µl	ZDV	0.64mm (G23s)	42mm	AS	ea.	2204052	5188-5246
3030147	0.5µl	ZDV	0.64mm (G23s)	70mm	AS	ea.	2200061	5182-9651
3030177	1.2µl	ZDV	0.47mm (G26P)	51mm	AS	ea.	2620001	
3030148	1µl	ZDV	0.47mm (G26s)	70mm	AS	ea.	2200110	5182-9605
3030152 ^{*)}	1µl	ZDV	0.64mm (G23)	42mm	AS	ea.	2204103	5188-5247
3030149	1µl	ZDV	0.64mm (G23s)	70mm	AS	ea.	2200113	5182-9627
3030150	5µl	ZDV	0.64mm (G23)	70mm	AS	ea.	2200306	5182-9623

^{*)} For Agilent Autosampler.

SETonic Microsyringes for manual use

Luer Tip Syringes



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Stainless Steel Plunger with PTFE Seal 5µl-10.0ml

Part No.	Volume	Needle	ILS	Hamilton
3030286	5µl	w/o	2600314	
3030287	10µl	w/o	2600412	
3030288	25µl	w/o	2600511	80201
3030289	50µl	w/o	2600611	80901
3030290	100µl	w/o	2600711	81001
3030291	250µl	w/o	2600811	81101
3030292	500µl	w/o	2600911	81201
3030293	1.0ml	w/o	2600013	81301
3030294	2.5ml	w/o	2600033	81401
3030295	5.0ml	w/o	2600053	81501
3030296	10.0ml	w/o	2600073	81601



NLL - Luer Lock Needles - Needle Tip Style a*, Needle Length 51mm

Part No.	for Syringe Volume	OD (Gauge)	Qty.
3050260	all volume needle	0.47mm (G26s)	pk.3
3050261	all volume needle	0.47mm (G26)	pk.3
3050262	all volume needle	0.64mm (G23s)	pk.3
3050263	all volume needle	0.64mm (G23)	pk.3
3050264	all volume needle	0.72mm (G22s)	pk.3
3050265	all volume needle	0.72mm (G22)	pk.3
3050266	all volume needle	1.1mm (G19)	pk.3

* Also available in other pointstyles.

Syringe Guide for manual injection



Part No.	for Syringe Volume	OD (Gauge)	Qty.
3070037*	0.5µl - 1.0ml	n/a	ea.

* Delivery without syringe

SETonic Tech Tip:

- Prevents the bending of the plunger
- Can be preset for desired volume
- Prevent the plunger blow out
- You need no tools for changing the syringe
- You can use on plungers

How to use:

- Disconnect the screws
- Put the syringe in the holder
- Fix the screws
- You can use this guide for ø6.5mm up to ø8.0mm glass barrels
- Use the appropriate screw and washer

SETonic Microsyringes for HPLC

Manual Using Waters UK6 Valve

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Part No.	Volume	Needle	OD (Gauge)	Needle Length	Point Style	Qty.	ILS	Hamilton
3030799*	10µl	SS	0.50mm (G25s)	50mm	b EH	ea.	2502404	
3031098*	10µl	SS	0.50mm (G25s)	50mm	b EH	ea.	2602604	84983
3031099*	25µl	SS	0.50mm (G25s)	50mm	b EH	ea.	2502504	84980
3031100*	100µl	SS	0.50mm (G25s)	50mm	b EH	ea.	2502704	84986
3031101	10µl	SS	0.50mm (G25s)	50mm	b	ea.	2102406	84815
3031102	25µl	SS	0.50mm (G25s)	50mm	b	ea.	2102506	84816
3031103*	25µl	PTFE	0.50mm (G25s)	50mm	b EH	ea.	2602506	80238
3031104*	50µl	PTFE	0.50mm (G25s)	50mm	b EH	ea.	2602606	80938
3031105	50µl	PTFE	0.50mm (G25s)	50mm	b	ea.		84817
3031106*	100µl	PTFE	0.50mm (G25s)	50mm	b EH	ea.	2602706	
3031107	100µl	SS	0.50mm (G25s)	50mm	b	ea.		
3031108*	250µl	SS	0.50mm (G25s)	50mm	b EH	ea.	2502804	
3031109*	250µl	PTFE	0.50mm (G25s)	50mm	b EH	ea.	2602806	81138
3031110	250µl	SS	0.50mm (G25s)	50mm	b	ea.		84819

*) With Extended Handle.

Spark Holland Autosampler



The SETonic Syringes for Spark Holland Autosamplers work with the following manufacturers autosamplers:

- Spark Holland Midas, Triathlon, Endurance and Alias
- Antec AS 100 and AS 110
- Dionex ESA Model 542, 540 and 540MT
- Beckmann Coulter 508
- Grace/Alltech Model 580
- Agilent Pro Star

Part No.	Volume	Plunger Type	Syringe Termination	Qty.	ILS	Hamilton	SGE
3010083	25µl	PTFE	1/4"-28 UNF	ea.	2608517	62161-01	
3010084	50µl	PTFE	1/4"-28 UNF	ea.	2608617		
3010085	100µl	PTFE	1/4"-28 UNF	ea.	2608717	54658-01	
3010086	250µl	PTFE	1/4"-28 UNF	ea.	2608817	54658-01	006683
3010087	500µl	PTFE	1/4"-28 UNF	ea.	2608917	54660-01	
3010088	1.0ml	PTFE	1/4"-28 UNF	ea.	2608017	54661-01	008183
3010089	2.5ml	PTFE	1/4"-28 UNF	ea.	2608038	65662-01	

Dionex™

Replacement Syringes for use with ultimate 3000 and WPS 3000 Autosampler



Part No.	Volume	Plunger Type	Syringe Termination	Qty.	ILS
3010070	25µl	PTFE	1/4"-28 UNF	ea.	2608525
3010071	50µl	PTFE	1/4"-28 UNF	ea.	2608625
3010072	100µl	PTFE	1/4"-28 UNF	ea.	2608725
3010073	250µl	PTFE	1/4"-28 UNF	ea.	2608825
3010074	500µl	PTFE	1/4"-28 UNF	ea.	2608925
3010075	1.0ml	PTFE	1/4"-28 UNF	ea.	2608025
3010076	5.0ml	PTFE	1/4"-28 UNF	ea.	2608062

SETonic Microsyringes for HPLC

Replacement Syringes for Gilson 402



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Part No.	Volume	Plunger Type	Syringe Termination	Qty.	ILS	Gilson
3010504	100µl	PTFE	M10	ea.	2629710	25025341
3020505	250µl	PTFE	M10	ea.	2629810	25025342
3010316	500µl	PTFE	M10	ea.	2629910	25025347
3010004	1.0ml	PTFE	M10	ea.	2629015	25025343
3010146	2.5ml	PTFE	M10	ea.	2629031	
3010005	5.0ml	PTFE	M10	ea.	2629051	25025344
3010002	10.0ml	PTFE	M10	ea.	2629071	25025345
3010003	25.0ml	PTFE	M10	ea.	2629091	25025346
3010229	50.0ml	PTFE	M10	ea.	2629095	

Replacement Syringes for Merck Hitachi



Part No.	Volume	Plunger Type	Syringe Termination	Qty.	ILS	Hamilton	SGE
3010130	100µl	PTFE	M10x1	ea.	2611712		
3010131	500µl	PTFE	M10x1	ea.	2611912	0160310	007660
3010132	1.0ml	PTFE	M10x1	ea.	2611012		
3010133	2.5ml	PTFE	M10x1	ea.	2611032		

Replacement AD Syringes



Part No.	Volume	Plunger Type	Syringe Termination	Qty.	ILS	Hamilton
3010180	50µl	PTFE	M8x1	ea.	2605613	
3010181	100µl	PTFE	M8x1	ea.	2605713	
3010182	250µl	PTFE	M8x1	ea.	2605713	201100
3010183	500µl	PTFE	M8x1	ea.	2605913	201150
3010184	1.0ml	PTFE	M8x1	ea.	2605014	201200
3010185	2.5ml	PTFE	M8x1	ea.	2605034	201350
3010186	5.0ml	PTFE	M8x1	ea.	2605054	201300
3010187	10.0ml	PTFE	M8x1	ea.	2605074	201350
3010188	25.0ml	PTFE	M8x1	ea.	2605094	

Part No.	Volume	Plunger Type	Syringe Termination	Qty.	ILS
3010189	50µl	PE-HD	M8x1	ea.	2605618
3010190	100µl	PE-HD	M8x1	ea.	2605718
3010191	250µl	PE-HD	M8x1	ea.	2605818
3010192	500µl	PE-HD	M8x1	ea.	2605918
3010193	1.0ml	PE-HD	M8x1	ea.	2605018
3010194	2.5ml	PE-HD	M8x1	ea.	2605038
3010195	5.0ml	PE-HD	M8x1	ea.	2605058
3010196	10.0ml	PE-HD	M8x1	ea.	2605078

SETonic Microsyringes for HPLC

Replacement Syringes for Shimadzu

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Part No.	Volume	Plunger Type	Syringe Termination	Qty.	ILS	Hamilton
3010206	500µl	PTFE	1/4"-28UNF	ea.	2606914	81260
3010208	2.5ml	PTFE	1/4"-28UNF	ea.	2606035	81460

Replacement Syringes for Thermo Finnigan, Thermo Separation, Varian

Part No.	Volume	Plunger Type	Syringe Termination	Qty.	ILS	Hamilton
3010204	100µl	PTFE	1/4"-28UNF	ea.	2606714	
3010205	250µl	PTFE	1/4"-28UNF	ea.	2606814	
3010206	500µl	PTFE	1/4"-28UNF	ea.	2606914	202192
3010207	1.0ml	PTFE	1/4"-28UNF	ea.	2606015	
3010208	2.5ml	PTFE	1/4"-28UNF	ea.	2606035	81460

Replacement Syringes for Thermo Finnigan AS 100/300 AS 1000/3000/3500

Part No.	Volume	Plunger Type	Syringe Termination	Qty.	ILS	SGE	Hamilton
3010353	250µl	PTFE	1/4"-28UNF	ea.	2606815	006995	81162
3010354	500µl	PTFE	1/4"-28UNF	ea.	2606915	007995	81262
3010207	1.0ml	PTFE	1/4"-28UNF	ea.	2606015	008185	81360
3010208	2.5ml	PTFE	1/4"-28UNF	ea.	2606035	81460	81460

Replacement Syringes for Perkin Elmer Series 200

Part No.	Volume	Plunger Type	Syringe Termination	Qty.	ILS	SGE	Hamilton
3010349	10µl	PTFE	1/4"-28UNF	ea.			
3010350	25µl	PTFE	1/4"-28UNF	ea.	2606615		
3010351	50µl	PTFE	1/4"-28UNF	ea.		004995	80962
3010352	100µl	PTFE	1/4"-28UNF	ea.		005990	81062
3010353	250µl	PTFE	1/4"-28UNF	ea.	2606815	006995	81162
3010354	500µl	PTFE	1/4"-28UNF	ea.	2606915	007995	81262
3010207	1.0ml	PTFE	1/4"-28UNF	ea.	2606015	008185	81360
3010208	2.5ml	PTFE	1/4"-28UNF	ea.	2606035	008687	81460

Replacement Syringes for Kontron 360/460/465

Part No.	Volume	Plunger Type	Syringe Termination	Qty.	ILS	SGE
3010355	50µl	PTFE	1/4"-28UNF	ea.		
3010356	100µl	PTFE	1/4"-28UNF	ea.		
3010357	250µl	PTFE	1/4"-28UNF	ea.	2652816	006684
3010358	500ml	PTFE	1/4"-28UNF	ea.	2652916	007684
3010359	1.0ml	PTFE	1/4"-28UNF	ea.	2652016	008184
3010360	2.5ml	PTFE	1/4"-28UNF	ea.	2652036	008584

SETonic Microsyringes for TLC

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Syringes Fixed Needle 5µl-100µl - Needle Tip Style b, Needle Length 51mm, coated

Part No.	Volume	Plunger Type	Needle	OD (Gauge)	Qty.	Hamilton
3030826	5µl	SS	FN	0.47mm(G26s)	ea.	
3030692	10µl	SS	FN	0.47mm (G26s)	ea.	80050
3030693	25µl	SS	FN	0.72mm (G22s)	ea.	80250
3030694	50µl	SS	FN	0.72mm (G22)	ea.	80950
3030695	100µl	SS	FN	0.72mm (G22)	ea.	81050

Syringes for CAMAG Linomat 3/4/5

Part No.	Volume	Qty.	ILS
3030639	10µl	ea.	
3030638	25µl	ea.	2606504
3030693	100µl	ea.	2606702
3030635	250µl	ea.	2606803

SETonic Tech Tip: Syringes for use with Shut-Off Valve



Part No.	for Syringe Volume	Termination	Qty.
3030437	50µl	1/4"-28UNF	ea.
3030438	100µl	1/4"-28UNF	ea.
3030439	250µl	1/4"-28UNF	ea.
3030440	500µl	1/4"-28UNF	ea.
3030441	1.0ml	1/4"-28UNF	ea.
3030442	2.5ml	1/4"-28UNF	ea.

* Delivery without valve. Valve and custom needle available.

SETonic Liquid Handling Syringes - 60mm Stroke



SETonic offers microsyringes for various kinds of autosamplers, dilutors and liquid handling systems as well as custom designed solutions. A wide range of different plunger material is available. Try our PTFE NUB seal with optimized design for salty solutions or choose our PCTFE insert for improved syringe sealing.

Gas-Tight TLL/TLL-X Syringes - Luer Lock Syringes



- Kratel Partoscope F
- Tecan Dilutors 450,460,470
- Tecan Sampler 505,510,5052
- Hamilton PSD/6

Available with PTFE NUB and PE-HD Plunger Seal

TLL Syringes 25µl-25.0ml

Part No.	Volume	Plunger Type	Termination	Qty.	ILS	Hamilton
3010299	25µl	PTFE	Luer Lock	ea.	2607509	
3010300	50µl	PTFE	Luer Lock	ea.	2607609	
3010317	100µl	PTFE	Luer Lock	ea.	2607709	81020
3010318	250µl	PTFE	Luer Lock	ea.	2607809	81120
3010319	500µl	PTFE	Luer Lock	ea.	2607909	
3010175	1.0ml	PTFE	Luer Lock	ea.	2607011	81320
3010176	2.5ml	PTFE	Luer Lock	ea.	2607031	81420
3010177	5.0ml	PTFE	Luer Lock	ea.	2607052	81520
3010178	10.0ml	PTFE	Luer Lock	ea.	2607071	81620
3010179	25.0ml	PTFE	Luer Lock	ea.	2607091	82520

TLL-X Syringes 25µl-10.0ml with 6-32UNC Female Plunger Thread

Part No.	Volume	Plunger Type	Termination	Qty.	ILS	Hamilton
3010262	25µl	PTFE	Luer Lock	ea.	2607517	
3010263	50µl	PTFE	Luer Lock	ea.	2607617	80922
3010264	100µl	PTFE	Luer Lock	ea.	2607717	81022
3010265	250µl	PTFE	Luer Lock	ea.	2607817	81122
3010266	500µl	PTFE	Luer Lock	ea.	2607917	81222
3010267	1.0ml	PTFE	Luer Lock	ea.	2607017	81322
3010268	2.5ml	PTFE	Luer Lock	ea.	2607037	
3010269	5.0ml	PTFE	Luer Lock	ea.		
3010270	10.0ml	PTFE	Luer Lock	ea.	2606077	

SETonic Liquid Handling Syringes - 60mm Stroke

XLP Syringes 25µl-100.0ml



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Replacement Syringes for Tecan syringe pumps

Part No.	Volume	Plunger Type	Termination	Qty.	ILS	Reference
3010008	25µl	PTFE	1/4"-28UNF	ea.	2679511	
3010009	50µl	PTFE	1/4"-28UNF	ea.	2679611	20734801
3010010	100µl	PTFE	1/4"-28UNF	ea.	2679711	20734802
3010011	250µl	PTFE	1/4"-28UNF	ea.	2679811	20734803
3010012	500µl	PTFE	1/4"-28UNF	ea.	2679911	20734804
3010013	1.0ml	PTFE	1/4"-28UNF	ea.	2679011	20734805
3010014	2.5ml	PTFE	1/4"-28UNF	ea.	2679031	20734806
3010015	5.0ml	PTFE	1/4"-28UNF	ea.	2679051	20734807
3010016	10.0ml	PTFE	1/4"-28UNF	ea.	2679071	20734808
3010017	25.0ml	PTFE	1/4"-28UNF	ea.	2679091	20734809
3010018	50.0ml	PTFE	1/4"-28UNF	ea.	2679101	20736652

Part No.	Volume	Plunger Type	Termination	Qty.	ILS
3010028	100µl	PTFE NUB	1/4"-28UNF	ea.	2679714
3010029	250µl	PTFE NUB	1/4"-28UNF	ea.	2679814
3010030	500µl	PTFE NUB	1/4"-28UNF	ea.	2679914
3010031	1,0ml	PTFE NUB	1/4"-28UNF	ea.	2679014
3010032	2.5ml	PTFE NUB	1/4"-28UNF	ea.	2679033
3010033	5.0ml	PTFE NUB	1/4"-28UNF	ea.	2679051-BL
3010034	10.0ml	PTFE NUB	1/4"-28UNF	ea.	2679071-BL

Part No.	Volume	Plunger Type	Termination	Qty.	ILS	Reference
3010019	50µl	PE-HD	1/4"-28UNF	ea.	2679613	30036574
3010020	100µl	PE-HD	1/4"-28UNF	ea.	2679713	30036575
3010021	250µl	PE-HD	1/4"-28UNF	ea.	2679813	30036576
3010022	500µl	PE-HD	1/4"-28UNF	ea.	2679913	30036577
3010023	1.0ml	PE-HD	1/4"-28UNF	ea.	2679015	30036578
3010024	2.5ml	PE-HD	1/4"-28UNF	ea.	2679035	30036579
3010025	5.0ml	PE-HD	1/4"-28UNF	ea.	2679055	
3010026	10.0ml	PE-HD	1/4"-28UNF	ea.	2679075	
3010027	100.0ml	PE-HD	1/4"-28UNF	ea.	2679095	

SETonic Tech Tip:

PTFE NUB Seal

PTFE NUB is specially developed compound for microsyringe application to increase lifetime:

- high chemical resistance
- less friction than virgin PTFE
- less electronic charge
- higher robustness
- less "cold flow"
- higher longevity

PE-HD Seal

With better durability than virginal PTFE, when working with saline solution PTFE Seal Plunger.

PTFE Seal

Gas-tight sealing of the plunger tip, for most solvents and chemicals.

PTFE is a fluorocarbon solid, as it is a high-molecular-weight compound consisting wholly of carbon and fluorine. PTFE is hydrophobic: neither water nor water-containing substances wet PTFE, as fluorocarbons demonstrate mitigated London dispersion forces due to the high electronegativity of fluorine. PTFE has one of the lowest coefficients of friction of any solid. We use best quality virgin PTFE from selected sources only. The seal design is depending on syringe type and application.

SETonic Liquid Handling Syringes - 60mm Stroke

C-KP Syringes 25µl-50.0ml



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 in
 Germany

Replacement Syringes for Tecan syringe pump

Part No.	Volume	Plunger Type	Termination	Qty.	ILS	Reference
3010128	25µl	PTFE	1/4"-28UNF	ea.	2608515	17591
3010127	50µl	PTFE	1/4"-28UNF	ea.	2608615	17592
3010126	100µl	PTFE	1/4"-28UNF	ea.	2608715	17593
3010125	250µl	PTFE	1/4"-28UNF	ea.	2608815	17594
3010124	500µl	PTFE	1/4"-28UNF	ea.	2608915	17595
3010123	1.0ml	PTFE	1/4"-28UNF	ea.	2608015	17596
3010122	2.5ml	PTFE	1/4"-28UNF	ea.	2608035	17598
3010121	5.0ml	PTFE	1/4"-28UNF	ea.	2608055	17599
3010120	10.0ml	PTFE	1/4"-28UNF	ea.	2608075	17600

Part No.	Volume	Plunger Type	Termination	Qty.	ILS
3010059	25µl	PTFE NUB	1/4"-28UNF	ea.	2608515-BL
3010060	50µl	PTFE NUB	1/4"-28UNF	ea.	2608615-BL
3010061	100µl	PTFE NUB	1/4"-28UNF	ea.	2608715-BL
3010062	250µl	PTFE NUB	1/4"-28UNF	ea.	2608819-BL
3010063	500µl	PTFE NUB	1/4"-28UNF	ea.	2608915-BL
3010064	1.0ml	PTFE NUB	1/4"-28UNF	ea.	2608040-BL
3010065	2.5ml	PTFE NUB	1/4"-28UNF	ea.	2608035-BL
3010066	5.0ml	PTFE NUB	1/4"-28UNF	ea.	
3010067	10.0ml	PTFE NUB	1/4"-28UNF	ea.	2608075-BL

Part No.	Volume	Plunger Type	Termination	Qty.	ILS	Reference
3010047	25µl	PE-HD	1/4"-28UNF	ea.	2608516	26662
3010048	50µl	PE-HD	1/4"-28UNF	ea.	2608616	24681
3010049	100µl	PE-HD	1/4"-28UNF	ea.	2608716	24518
3010050	250µl	PE-HD	1/4"-28UNF	ea.	2608816	19513
3010051	500µl	PE-HD	1/4"-28UNF	ea.	2608916	24694
3010052	1.0ml	PE-HD	1/4"-28UNF	ea.	2608016	24690
3010053	1.25ml	PE-HD	1/4"-28UNF	ea.	2608127	26652
3010054	2.5ml	PE-HD	1/4"-28UNF	ea.	2608036	24685
3010055	5.0ml	PE-HD	1/4"-28UNF	ea.	2608056	19536
3010056	10.0ml	PE-HD	1/4"-28UNF	ea.	2608076	19110
3010057	25.0ml	PE-HD	1/4"-28UNF	ea.	2608096	24688
3010058	50.0ml	PE-HD	1/4"-28UNF	ea.	2608105-PE	

Flange Tool Kit



Part No.	Description	Qty.
3070091	Flange Tool Kit	ea.

SETonic Liquid Handling Syringes - 60mm Stroke

PEEK Tubing Connector Syringes



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 Germany

For use with all kinds of infusion pumps

Part No.	Volume	Plunger Type	Termination	Qty.	ILS
3010230	10µl	PTFE	1/4"-28UNF	ea.	2624415
3010231	25µl	PTFE	1/4"-28UNF	ea.	2624515
3010232	50µl	PTFE	1/4"-28UNF	ea.	2624615
3010233	100µl	PTFE	1/4"-28UNF	ea.	2624715
3010234	250µl	PTFE	1/4"-28UNF	ea.	2624815
3010235	500µl	PTFE	1/4"-28UNF	ea.	2624915
3010236	1.0ml	PTFE	1/4"-28UNF	ea.	2624016
3010237	2.5ml	PTFE	1/4"-28UNF	ea.	2624036
3010238	5.0ml	PTFE	1/4"-28UNF	ea.	2624056
3010239	10.0ml	PTFE	1/4"-28UNF	ea.	2624076
3010240	25.0ml	PTFE	1/4"-28UNF	ea.	2624096
3010241	50.0ml	PTFE	1/4"-28UNF	ea.	2624102

Part No.	Volume	Plunger Type	Termination	Qty.	ILS
3010242	10µl	PTFE	M6	ea.	2624414
3010243	25µl	PTFE	M6	ea.	2624514
3010244	50µl	PTFE	M6	ea.	2624614
3010245	100µl	PTFE	M6	ea.	2624714
3010246	250µl	PTFE	M6	ea.	2624814
3010247	500µl	PTFE	M6	ea.	2624914
3010248	1.0ml	PTFE	M6	ea.	2624015
3010249	2.5ml	PTFE	M6	ea.	2624035
3010250	5.0ml	PTFE	M6	ea.	2624055
3010251	10.0ml	PTFE	M6	ea.	2624075
3010252	25.0ml	PTFE	M6	ea.	2624095
3010253	50.0ml	PTFE	M6	ea.	2624101

Part No.	Volume	Plunger Type	Termination	Qty.	ILS
3010254	100µl	PE-HD	1/4"-28UNF	ea.	2624719
3010255	250µl	PE-HD	1/4"-28UNF	ea.	2624819
3010256	500µl	PE-HD	1/4"-28UNF	ea.	2624919
3010257	1.0ml	PE-HD	1/4"-28UNF	ea.	2624017
3010258	2.5ml	PE-HD	1/4"-28UNF	ea.	2624037
3010259	5.0ml	PE-HD	1/4"-28UNF	ea.	2624059
3010260	10.0ml	PE-HD	1/4"-28UNF	ea.	2624080
3010261	25.0ml	PE-HD	1/4"-28UNF	ea.	2624098

SETonic Tech Tip:

- Place the supplied PTFE Washer (sealing disc) on the bottom of the inner thread.
- Tighten the fitting hand-tight. If the connection is still leaking, gently pull.
- Do not use a gripper to tighten.
- For M6 syringes use M6 fittings and for 1/4"-28UNF syringe fittings with 1/4"-28UNF thread.
- You can use ferrule fittings or flanged fittings.

SETonic offers you a wide range of fittings and the matching tools (see page 18).



SETonic Liquid Handling Syringes - 60mm Stroke

Syringes for use with CETONI Pumps

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 Germany



Part No.	Volume	Plunger Type	Syringe Termination	Qty.
3010393	100µl	PTFE	1/4"-28UNF - M3	ea.
3010487	250ul	PTFE	1/4"-28UNF - M3	ea.
3010387	500ul	PTFE	1/4"-28UNF - M3	ea.
3010307	1.0ml	PTFE	1/4"-28UNF - M3	ea.
3010452	2.5ml	PTFE	1/4"-28UNF - M3	ea.
3010309	5.0ml	PTFE	1/4"-28UNF - M3	ea.
3010310	10.0ml	PTFE	1/4"-28UNF - M3	ea.
3010311	25.0ml	PTFE	1/4"-28UNF - M3	ea.
3010312	50.0ml	PTFE	1/4"-28UNF - M3	ea.

SETonic Tech Tip:

Pressure Limits

Volume	Dimension	psi	bar
50 µl	O.D. 8 mm	1500	108
100 µl	O.D. 8 mm	1400	89
250 µl	O.D. 8 mm	1100	77
500 µl	O.D. 8 mm	800	58
1.0 ml	O.D. 8 mm	500	37
2.5 ml	Wallthickness 1.5 mm	300	23
5.0 ml	Wallthickness 1.5 mm	200	17
10.0 ml	Wallthickness 1.5 mm	180	13
25.0 ml	Wallthickness 2.0 mm	150	11
50.0 ml	Wallthickness 2.0 mm	115	8
100.0 ml	Wallthickness 2.0 mm	115	8

Syringe for use with Kone Instruments



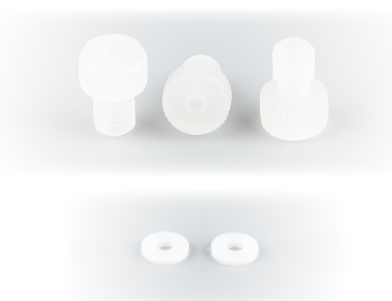
Part No.	Volume	Plunger Type	Syringe Termination	Qty.
3010374	500µl	PTFE	2x M6 Kone-T	ea.

Flangeless Fittings & Washer

Part No.	for Tubing	Thread*	Qty.
3070077	1.6mm	1/4"-28UNF	pk.10
3070078	2.1mm	1/4"-28UNF	pk.10
3070079	2.7mm	1/4"-28UNF	pk.10
3070055	3.2mm	1/4"-28UNF	pk.10

Washer			
3070000	all type	1/4"-28UNF	pk.3
3070031	all type	M6	pk.3

* Also available with M6 or custom thread.



SETonic Liquid Handling Syringes - 30mm Stroke

XP - Replacement Syringes for Tecan Pump



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 in
 Germany

Part No.	Volume	Plunger Type	Termination	Qty.	ILS	Reference
3020003	25µl	PTFE	1/4"-28UNF	ea.	2607515	
3020004	50µl	PTFE	1/4"-28UNF	ea.	2607615	201720 725676
3020005	100µl	PTFE	1/4"-28UNF	ea.	2607715	201730 725682
3020006	250µl	PTFE	1/4"-28UNF	ea.	2607815	201740 725589
3020007	500µl	PTFE	1/4"-28UNF	ea.	2607915	725590
3020008	1.0ml	PTFE	1/4"-28UNF	ea.	2607015	201760 725591
3020009	2.5ml	PTFE	1/4"-28UNF	ea.	2607035	201770 725592
3020010	5.0ml	PTFE	1/4"-28UNF	ea.	2607075	201780 725593

Part No.	Volume	Plunger Type	Termination	Qty.	ILS
3020016	50µl	PTFE NUB	1/4"-28UNF	ea.	9607615
3020017	100µl	PTFE NUB	1/4"-28UNF	ea.	9607715
3020018	150µl	PTFE NUB	1/4"-28UNF	ea.	
3020019	250µl	PTFE NUB	1/4"-28UNF	ea.	9607811
3020020	500µl	PTFE NUB	1/4"-28UNF	ea.	9607911
3020021	1.0ml	PTFE NUB	1/4"-28UNF	ea.	9607011
3020025	2.5ml	PTFE NUB	1/4"-28UNF	ea.	9607034
3020026	5.0ml	PTFE NUB	1/4"-28UNF	ea.	9607074

Part No.	Volume	Plunger Type	Termination	Qty.	ILS	Reference
3020011	50µl	PE-HD	1/4"-28UNF	ea.	2647618	
3020012	100µl	PE-HD	1/4"-28UNF	ea.	2647718	
3020013	250µl	PE-HD	1/4"-28UNF	ea.	2647818	
3020014	500µl	PE-HD	1/4"-28UNF	ea.	2647918	
3020015	1.0ml	PE-HD	1/4"-28UNF	ea.	2647018	730141

SETonic Tech Tip:

These unique syringes are made with PEEK Front Fitting and Washerless Insert. For use with aggressive solvents.



Part No.	Volume	Plunger Type	Syringe Termination	Qty.
3020070	500µl	PTFE	1/4"-28 UNF	ea.
3020071	2.5ml	PTFE	1/4"-28 UNF	ea.
3020093	5.0ml	PTFE	1/4"-28 UNF	ea.
3020092	12.5ml	PTFE	1/4"-28 UNF	ea.

XE - Replacement Syringes for Tecan Pump



Part No.	Volume	Plunger Type	Termination	Qty.	ILS	Reference
3020027	50µl	PTFE	1/4"-28 UNF	ea.	2607521	730070
3020028	100µl	PTFE	1/4"-28 UNF	ea.	2607621	730071
3020029	250µl	PTFE	1/4"-28 UNF	ea.	2607821	731069
3020030	500µl	PTFE	1/4"-28UNF	ea.	2607921	728661
3020031	1.0ml	PTFE	1/4"-28 UNF	ea.	2607021	728662
3020032	2.5ml	PTFE	1/4"-28 UNF	ea.	2607041	728663
3020033	5.0ml	PTFE	1/4"-28 UNF	ea.	2607061	728664

SETonic Liquid Handling Syringes - 30mm Stroke

H-PD - Replacement Syringes for Hamilton PSD4 Pump

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 in
 Germany

Part No.	Volume	Plunger Type	Termination	Qty.	ILS	Hamilton
3020041	12.5µl	PTFE	1/4"-28UNF	ea.	2658415	5495-10
3020042	25µl	PTFE	1/4"-28UNF	ea.	2658515	5495-15
3020043	50µl	PTFE	1/4"-28UNF	ea.	2658615	5495-20
3020044	100µl	PTFE	1/4"-28UNF	ea.	2658715	5495-22
3020045	125µl	PTFE	1/4"-28UNF	ea.	2658714	5495-25
3020046	250µl	PTFE	1/4"-28UNF	ea.	2658815	5495-30
3020047	500µl	PTFE	1/4"-28UNF	ea.	2658915	5495-35
3020048	1.0ml	PTFE	1/4"-28UNF	ea.	2658014	5495-38
3020049	1.25ml	PTFE	1/4"-28UNF	ea.	2658015	5495-40
3020050	2.5ml	PTFE	1/4"-28UNF	ea.	2658035	5495-45
3020051	5.0ml	PTFE	1/4"-28UNF	ea.	2658055	5495-50
3020052	12.5ml	PTFE	1/4"-28UNF	ea.	2658074	5495-55

Part No.	Volume	Plunger Type	Termination	Qty.	ILS	Hamilton
3020053	25µl	PE-HD	1/4"-28UNF	ea.	2665515	8250-15
3020054	50µl	PE-HD	1/4"-28UNF	ea.	2665615	8250-20
3020055	100µl	PE-HD	1/4"-28UNF	ea.	2665715	8250-22
3020056	125µl	PE-HD	1/4"-28UNF	ea.	2665714	8250-25
3020057	250µl	PE-HD	1/4"-28UNF	ea.	2665815	8250-30
3020058	500µl	PE-HD	1/4"-28UNF	ea.	2665915	8250-35
3020059	1.0ml	PE-HD	1/4"-28UNF	ea.	2665014	8250-37
3020060	1.25ml	PE-HD	1/4"-28UNF	ea.	2665015	8250-40
3020154	2.5ml	PE-HD	1/4"-28UNF	ea.		8250-45
3020155	5.0ml	PE-HD	1/4"-28UNF	ea.		8250-45

XP - XL Replacement Syringes - Plunger Sidehole Connection

Part No.	Volume	Plunger Type	Termination	Qty.	ILS
3020121	25µl	PTFE	1/4"-28 UNF	ea.	2676515
3020122	50µl	PTFE	1/4"-28 UNF	ea.	2676615
3020123	100µl	PTFE	1/4"-28 UNF	ea.	2676715
3020124	250µl	PTFE	1/4"-28UNF	ea.	2676815
3020125	500µl	PTFE	1/4"-28 UNF	ea.	2676915
3020126	1.0ml	PTFE	1/4"-28 UNF	ea.	2676015
3020127	1.5ml	PTFE	1/4"-28 UNF	ea.	2676020
3020128	2.5ml	PTFE	1/4"-28UNF	ea.	2676035
3020129	5.0ml	PTFE	1/4"-28UNF	ea.	2676055
3020130	12.5ml	PTFE	1/4"-28UNF	ea.	2676075

XP - XL Short Replacement Syringes - Plunger Sidehole Connection

Part No.	Volume	Plunger Type	Termination	Qty.	ILS
3020082	50µl	PTFE	1/4"-28 UNF Short	ea.	2685615
3020083	100µl	PTFE	1/4"-28 UNF	ea.	2685715
3020084	250µl	PTFE	1/4"-28 UNF	ea.	2685815
3020085	500µl	PTFE	1/4"-28UNF	ea.	2685915
3020086	1.0ml	PTFE	1/4"-28 UNF	ea.	2685015
3020087	2.5ml	PTFE	1/4"-28 UNF	ea.	2685035
3020088	5.0ml	PTFE	1/4"-28 UNF	ea.	2685055

SETonic Liquid Handling Syringes - Speciality

Luer Lock Glass Syringes



Part No.	Volume	Plunger Type	Syringe Termination	Qty.
3070027	2.0ml	Glass	Metal Luer Lock	ea.
3070029	5.0ml	Glass	Metal Luer Lock	ea.
3070028	10.0ml	Glass	Metal Luer Lock	ea.
3070082	20.0ml	Glass	Metal Luer Lock	ea.
3070032	30.0ml	Glass	Metal Luer Lock	ea.
3070033	50.0ml	Glass	Metal Luer Lock	ea.

Rosys® RQ Syringes - Teflon Luer Lock



Part No.	Volume	Plunger Type	Syringe Termination	Qty.	ILS
3010281	25µl	PTFE	TLL	ea.	2607512
3010282	50µl	PTFE	TLL	ea.	2607612
3010283	100µl	PTFE	TLL	ea.	2607712
3010284	250µl	PTFE	TLL	ea.	2607812
3010285	500µl	PTFE	TLL	ea.	2607912
3010286	1.0ml	PTFE	TLL	ea.	2607014
3010287	2.5ml	PTFE	TLL	ea.	2607034
3010288	5.0ml	PTFE	TLL	ea.	2607054
3010289	10.0ml	PTFE	TLL	ea.	2607074

Part No.	Volume	Plunger Type	Syringe Termination	Qty.	ILS
3010290	50µl	PE-HD	TLL	ea.	2644618
3010291	100µl	PE-HD	TLL	ea.	2644718
3010292	250µl	PE-HD	TLL	ea.	2644818
3010293	500µl	PE-HD	TLL	ea.	2644918
3010294	1.0ml	PE-HD	TLL	ea.	2644018
3010295	2.5ml	PE-HD	TLL	ea.	2644038
3010296	5.0ml	PE-HD	TLL	ea.	2644058
3010297	10.0ml	PE-HD	TLL	ea.	2644078

Syringes for Olympus AU400 AU480 AU640 AU680 AU2700 AU5400 AU5800



Part No.	Description	Plunger Type	Reference	Qty.
3010493	Olympus ISE	PTFE	ZM011200 R	ea.
3010494	Sample Syringe	PTFE	ZM011100	ea.
3010495	Sample Syringe	PTFE	ZM001600	ea.
3010002	8,8 A&B MLS	Glass	A&B	ea.

- Remove the cleaning wire from the needle before using it for the first time.
- The smallest volume to be dosed should not be less than 15% of the total volume.
- Check the syringe for cracks and the tip of the needle for damage, e.g. ridge, this leads to an injury of the septum.
- These particles can clog the needle or reach your chromatograph or column and lead to incorrect results.
- To avoid sample carryover, rinse the syringes 10-20 times with your solvent, and do not forget to discard the first 2-3 rinses.
- To remove air bubbles, aspirate the sample and dispense it quickly, while leaving the tip of the needle in the liquid.
- You can also hold the syringe up, so that the air bubble rises and then dispense some of the sample.
- Use the syringe at room temperature (23°C). After delivery, allow the syringes to adapt 24h to your room temperature.
- Use standard syringes only between room temperature (23°C) and max. 40°C.
- The humidity of the working environment should not exceed 40%.
- Do not use your syringes and connected equipment directly under air conditioners.

PEEK Tubing Connector Syringes

- Place the supplied PTFE Washer (sealing disc) on the bottom of the inner thread.
- Tighten the fitting hand-tight. If the connection is still leaking, gently pull.
- Do not use a gripper to tighten.
- For M6 syringes use M6 fittings and for 1/4"-28UNF syringe fittings with 1/4"-28UNF thread.
- You can use ferrule fittings or flanged fittings. SETonic GmbH offer you a wide range of fittings and the matching tools.

Temperature Range and Autoclaving Syringes (Headspace application)

The temperature range for our Headspace syringes is -40°C to 150°C. Exposure to high temperature should be limited as follows:

150°C for 15 minutes

120°C for 30 minutes

110°C for 60 minutes

If extra high temperatures are required, we will provide special-order syringes with glue that is compatible up to 225°C continuous or 325°C intermittent. All syringes can be autoclaved except fixed needle syringes, because the fixed needles are permanently glued to the glass barrel, these syringes will crack due to thermal expansion when autoclaved. For all other syringes simply remove the plunger and the removable needle (if applicable) before autoclaving.

Cleaning Instructions

- Remove the piston from the syringe and clean it in the ultrasonic bath.
- Rinse the glass body inside with solvent.
- At the end of the cleaning process it is best to add a solvent with a low boiling point (e.g., alcohol).
- Dry the glass body in an air stream, e.g. with a vacuum pump.



Caution: Do not immerse the entire glass body in solvent. The glued parts can peel off.

Clogged Needle

In the case of a clogged needle, the pressure increases rapidly. Use cleaning wires. All syringes are delivered with a cleaning wire inside the needle.

Syringe with sealed plunger

To reduce the operating force, heat the complete syringe in the oven at about 60°C for 15 minutes. Silicone or other lubricants that do not interfere with your examination also reduce the force of the actuator.



Caution: If possible, do not move the piston in a dry syringe, the seal may be damaged and the syringe will leak. The seal may also tear apart.

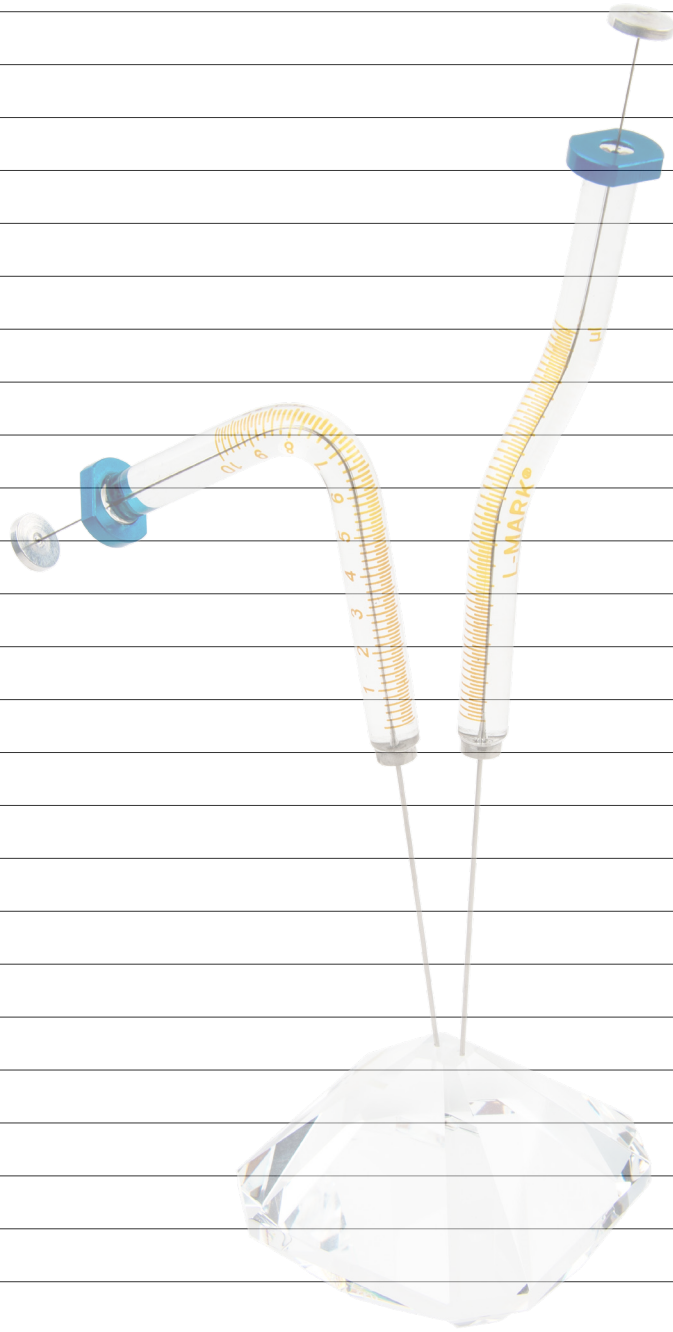
Syringe with Stainless Steel Plunger

- Clean the plunger in an ultrasonic bath.
- Wipe the plunger with a lint-free cloth or dry the flask in the air stream.

Zero Dead Volume Syringes

- Disconnect the coupling before removing the parts from the syringe.
- Clean the plunger and wipe it with a lint-free cloth.

NOTES:



SETonic



made
in
Germany

DE - 98693
Ilmenau
info@setonic.com

☎ +49 - 3677 - 7809823



www.setonic.com