

Микрошприцы CARL ROTH MICROLITER 700, MICROLITER 7000, GASTIGHT 1000, GASTIGHT 1700, HPLC, Gas-tight

Технические характеристики

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Microlitre syringes

Microlitre syringe MICROLITER® series 700

HAMILTON. Material: Borosilicate glass, Stainless steel.

For dispensing liquids. The piston is ground in to the glass body and the needle is fixed in place.



Technical specifications:

Correctness: $\leq \pm 1\%$ of the nominal volume. Test pressure: 0.6 MPa. Operating temperature: -10 to +50 °C

Not a medical device / Not an IVD product

Tip type 2

Needle with 12° grinding, slightly bent inwards; for penetrating septa during all chromatographic methods.

Type	Vol. (µl)	Graduation (µl)	Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Gauge	Art. No.	Pack Qty.	
701 N	10	0,1	0.13	0.47	51	26s ga	X033.1	1 unit(s)	
702 N	25	0,5	0.15	0.72	51	22s ga	X034.1	1 unit(s)	
705 N	50	1,0	0.15	0.72	51	22s ga	X035.1	1 unit(s)	
710 N	100	1,0	0.15	0.72	51	22s ga	X036.1	1 unit(s)	
725 N	250	5,0	0.15	0.72	51	22s ga	X038.1	1 unit(s)	
750 N	500	10,0	0.41	0.72	51	22 ga	X039.1	1 unit(s)	

Tip type 3

Needle with 90° grinding, blunt; for HPLC applications or for exact dispensing, for example, for thin-layer chromatography.

Type	Vol. (µl)	Graduation (µl)	Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Gauge	Art. No.	Pack Qty.	
701 NR	10	0,1	0.13	0.47	51	22s ga	EY37.1	1 unit(s)	
702 NR	25	0,5	0.15	0.72	51	22s ga	EY38.1	1 unit(s)	
705 NR	50	1,0	0.15	0.72	51	22s ga	EY39.1	1 unit(s)	
710 NR	100	1,0	0.15	0.72	51	22s ga	EY40.1	1 unit(s)	
725 NR	250	5,0	0.41	0.72	51	22 ga	EY41.1	1 unit(s)	
750 NR	500	10,0	0.41	0.72	51	22 ga	EY42.1	1 unit(s)	

Microlitre syringe series 700 standard GC

HAMILTON. Material: Borosilicate glass, Stainless steel.

For dispensing liquids with Agilent autosamplers HP 7683/HP 7673. The piston is ground in to the glass body. Needle with 8° grinding (special cone tip for autosamplers), fixed in place.



Technical specifications:

Correctness: $\leq \pm 1\%$ of the nominal volume. Test pressure: 0.6 MPa. Operating temperature: -10 to +50 °C

Not a medical device / Not an IVD product

Type	Vol. (µl)	Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Gauge	Art. No.	Pack Qty.	
701 ASN 23S	10	0.34	0.64	43	23s ga	X060.1	1 unit(s)	
701 ASN 26S	10	0.13	0.47	43	26s ga	X061.1	1 unit(s)	

Microlitre syringes

Microlitre syringe MICROLITER® series 7000

HAMILTON. Material: Borosilicate glass, Stainless steel.

For dispensing liquids, free from dead volume, with very low nominal volumes. The needle and Wolfram piston are perfectly coordinated. The volume dispensing takes place in the needle.



Technical specifications:

Correctness: $\leq \pm 1\%$ of the nominal volume. Test pressure: 0.6 MPa. Operating temperature: -10 to +50 °C

Not a medical device / Not an IVD product

Tip type 2

Needle with 12° grinding, slightly bent inwards; for penetrating septa during all chromatographic methods.

Type	Vol. (µl)	Graduation (µl)	Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Gauge	Art. No.	Pack Qty.	
7000.5 KH	0.5	0,005	0.10	0.51	70	25 ga	X056.1	1 unit(s)	
7001 KH	1.0	0,01	0.14	0.51	70	25 ga	X057.1	1 unit(s)	
7002 KH	2.0	0,02	0.20	0.51	70	25 ga	X058.1	1 unit(s)	
7105 KH	5.0	0,05	0.32	0.56	70	24 ga	X059.1	1 unit(s)	

Tip type 3

Needle with 90° grinding, blunt; for HPLC applications or for exact dispensing, for example, for thin-layer chromatography.

Type	Vol. (µl)	Graduation (µl)	Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Gauge	Art. No.	Pack Qty.	
7000.5 KH	0.5	0,005	0.10	0.51	70	25 ga	EY52.1	1 unit(s)	
7001 KH	1.0	0,01	0.14	0.51	70	25 ga	EY53.1	1 unit(s)	
7002 KH	2.0	0,02	0.20	0.51	70	25 ga	EY54.1	1 unit(s)	
7105 KH	5.0	0,05	0.32	0.56	70	24 ga	EY55.1	1 unit(s)	

Microlitre syringe GASTIGHT® series 1000

HAMILTON. Material: Borosilicate glass, Stainless steel, Aluminium PTFE-coated.

For dispensing liquids and media with a high vapour pressure. Glass body and piston are replaceable. With PTFE Luer-Lock connection.



Technical specifications:

Correctness: $\leq \pm 1\%$ of the nominal volume. Test pressure: 0.6 MPa. Operating temperature: -10 to +50 °C

Delivery without needle, please order separately.

Not a medical device / Not an IVD product

Type	Vol. (ml)	Graduation (ml)	Art. No.	Pack Qty.	
1001 TLL	1.0	0,01	X041.1	1 unit(s)	
1002 TLL	2.5	0,05	X042.1	1 unit(s)	
1005 TLL	5.0	0,10	X043.1	1 unit(s)	
1010 TLL	10.0	0,20	X044.1	1 unit(s)	



Microlitre syringes

Needles KF for 1000 series GASTIGHT® syringes

HAMILTON. Material: Stainless steel.
Luer-Lock connection PCTFE, 22G.



Not a medical device / Not an IVD product

Tip type 2

Needle with 12° grinding, slightly bent inwards; for penetrating septa during all chromatographic methods.

Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Art. No.	Pack Qty.	
0.41	0.72	51	X045.2	6 unit(s)	

Tip type 3

Needle with 90° grinding, blunt; for HPLC applications or for exact dispensing, for example, for thin-layer chromatography.

Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Art. No.	Pack Qty.	
0.41	0.72	51	EY43.1	6 unit(s)	

Microlitre syringe GASTIGHT® series 1700

HAMILTON. Material: Borosilicate glass, Stainless steel.
For dispensing liquids and gases. Glass body and piston are replaceable. With PTFE tips for sealing. Replaceable needle.



Technical specifications:

Correctness: $\leq \pm 1\%$ of the nominal volume. Test pressure: 0.6 MPa. Operating temperature: -10 to +50 °C

Not a medical device / Not an IVD product

Tip type 2

Needle with 12° grinding, slightly bent inwards; for penetrating septa during all chromatographic methods.

Type	Vol. (µl)	Graduation (µl)	Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Gauge	Art. No.	Pack Qty.	
1701 RN	10	0,1	0.13	0.47	51	26s ga	X046.1	1 unit(s)	
1702 RN	25	0,5	0.15	0.72	51	22s ga	X047.1	1 unit(s)	
1705 RN	50	1,0	0.15	0.72	51	22s ga	X048.1	1 unit(s)	
1710 RN	100	1,0	0.15	0.72	51	22s ga	X049.1	1 unit(s)	
1725 RN	250	5,0	0.15	0.72	51	22s ga	X050.1	1 unit(s)	
1750 RN	500	10,0	0.41	0.72	51	22 ga	X051.1	1 unit(s)	

Tip type 3

Needle with 90° grinding, blunt; for HPLC applications or for exact dispensing, for example, for thin-layer chromatography.

Type	Vol. (µl)	Graduation (µl)	Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Gauge	Art. No.	Pack Qty.	
1701 RNR	10	0,1	0.15	0.72	51	22s ga	EY44.1	1 unit(s)	
1702 RNR	25	0,5	0.15	0.72	51	22s ga	EY45.1	1 unit(s)	
1705 RNR	50	1,0	0.15	0.72	51	22s ga	EY46.1	1 unit(s)	
1710 RNR	100	1,0	0.15	0.72	51	22s ga	EY47.1	1 unit(s)	
1725 RNR	250	5,0	0.41	0.72	51	22 ga	EY48.1	1 unit(s)	
1750 RNR	500	10,0	0.41	0.72	51	22 ga	EY49.1	1 unit(s)	

Microlitre syringes

Microlitre syringe standard

ROTH SELECTION. Material: Borosilicate glass, Stainless steel 1.4301.

Needle with chamfered tip, fixed in place. This syringe may not be used for fluorid or strongly acidic liquids.



Technical specifications:

Tested up to 3.0 bar liquid pressure; calibrated with a $\pm 1\%$ accuracy; precise and easy-to-read scale; exact finishing prevents the creation of air bubbles, as far as possible

Not a medical device / Not an IVD product

Vol. (µl)	Graduation (µl)	Dead volume (µl)	Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Art. No.	Pack Qty.	
5	0,1	0,0 ±0,3	0.13	0.52	50	E114.1	1 unit(s)	
10	0,1	0,9 ±0,3	0.13	0.52	50	E115.1	1 unit(s)	
25	0,5	1,7 ±0,3	0.18	0.52	50	E116.1	1 unit(s)	
50	1,0	1,7 ±0,3	0.18	0.52	50	E117.1	1 unit(s)	
100	2,0	1,7 ±0,3	0.18	0.52	50	E118.1	1 unit(s)	
250	5,0	3,6 ±0,3	0.30	0.56	50	E119.1	1 unit(s)	
500	10,0	3,6 ±0,3	0.30	0.56	50	E120.1	1 unit(s)	

Microlitre syringe for HPLC

ROTH SELECTION. Material: Borosilicate glass, Stainless steel 1.4301.

For Rheodyne valves. The specially polished, blunt needle tip ensures the perfect density and prevents damage to the seal and rotor. Needle fixed in place.



Technical specifications:

Tested up to 3.0 bar liquid pressure; calibrated with a $\pm 1\%$ accuracy; precise and easy-to-read scale; exact finishing prevents the creation of air bubbles, as far as possible

Not a medical device / Not an IVD product

Vol. (µl)	Graduation (µl)	Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Art. No.	Pack Qty.	
25	0,5	0.18	0.72	51	E121.1	1 unit(s)	
50	1,0	0.18	0.72	51	E122.1	1 unit(s)	
100	2,0	0.18	0.72	51	E123.1	1 unit(s)	
200	5,0	0.18	0.72	51	E124.1	1 unit(s)	
500	10,0	0.18	0.72	51	E125.1	1 unit(s)	

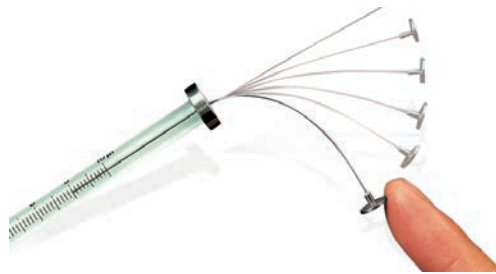


Microlitre syringes

Microlitre syringe with super-elastic plunger

ROTH SELECTION. Material: Borosilicate glass, Stainless steel 1.4301.

No longer possible to bend. Super-elastic plungers made from Ni-Ti alloy. Plungers always return to their original shape. Needle fixed in place.



Technical specifications:

Tested up to 3.0 bar liquid pressure; calibrated with a $\pm 1\%$ accuracy; precise and easy-to-read scale; exact finishing prevents the creation of air bubbles, as far as possible

Not a medical device / Not an IVD product

Version	Vol. (µl)	Graduation (µl)	Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Art. No.	Pack Qty.	
Needle sharp, for GC	5	0,1	0.13	0.52	50	E108.1	1 unit(s)	
Needle sharp, for GC	10	0,2	0.13	0.52	50	E109.1	1 unit(s)	
Needle blunt, for Waters	10	0,2	0.13	0.51	50	E113.1	1 unit(s)	
Needle blunt, for Rheodyne	10	0,2	0.18	0.72	51	E111.1	1 unit(s)	

Microlitre syringe for autosamplers

ROTH SELECTION. Material: Borosilicate glass, Stainless steel 1.4301.

For Agilent (HP) model 7673A. The models with the super-elastic plungers made from Ni-Ti alloy guarantee a longer useable life. Needle with conical tip, fixed in place.



Technical specifications:

Tested up to 3.0 bar liquid pressure; calibrated with a $\pm 1\%$ accuracy; precise and easy-to-read scale; exact finishing prevents the creation of air bubbles, as far as possible

Not a medical device / Not an IVD product

Version	Vol. (µl)	Graduation (µl)	Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Gauge	Art. No.	Pack Qty.	
Standard plungers	5	0,1	0.15	0.64	43	23 G	H136.1	1 unit(s)	
Super-elastic plungers	5	0,1	0.15	0.64	43	23 G	H140.1	1 unit(s)	
Standard plungers	10	0,2	0.15	0.64	43	23 G	H138.1	1 unit(s)	
Super-elastic plungers	10	0,2	0.15	0.64	43	23 G	H142.1	1 unit(s)	

Microlitre syringe with plunger guide

ROTH SELECTION. Material: Borosilicate glass, Stainless steel 1.4301.

Needle with chamfered tip, fixed in place.



Technical specifications:

Tested up to 3.0 bar liquid pressure; calibrated with a $\pm 1\%$ accuracy; precise and easy-to-read scale; exact finishing prevents the creation of air bubbles, as far as possible

Not a medical device / Not an IVD product

PTFE sleeve

Offers greater protection for the plunger in the guide.

Vol. (µl)	Graduation (µl)	Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Art. No.	Pack Qty.	
10	0,1	0.18	0.52	50	E127.1	1 unit(s)	

Microlitre syringes

Variable external guide

A fixing screw allows repeated injections for the same volume of liquid.

Vol. (µl)	Graduation (µl)	Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Art. No.	Pack Qty.	
10	0,1	0.18	0.52	50	E126.1	1 unit(s)	

Syringe Gas-tight

ROTH SELECTION. Material: Borosilicate glass, PTFE, Stainless steel 1.4301.

With specially polished syringe hole and PTFE plunger tip. Gas and liquid-tight up to a pressure of 5.0 kg/cm².



Technical specifications:

Tested up to 3.0 bar liquid pressure; calibrated with a $\pm 1\%$ accuracy; precise and easy-to-read scale; exact finishing prevents the creation of air bubbles, as far as possible

Not a medical device / Not an IVD product

With Luer-Lock connection

Ideal for applications requiring particular inertness.

Delivery without needle.

Vol. (ml)	Graduation (ml)	Art. No.	Pack Qty.	
1.0	0,02	E133.1	1 unit(s)	
2.5	0,05	E134.1	1 unit(s)	
5.0	0,10	E135.1	1 unit(s)	
10.0	0,20	E136.1	1 unit(s)	

With screw-top connection

Needle with chamfered tip, replaceable.

Delivery incl. needle.

Vol. (ml)	Graduation (ml)	Dead volume (µl)	Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Gauge	Art. No.	Pack Qty.	
1.0	0,02	2,2 $\pm$ 0,3	0.30	0.56	30	24 G	E128.1	1 unit(s)	
2.5	0,05	2,2 $\pm$ 0,3	0.30	0.56	30	24 G	E129.1	1 unit(s)	
5.0	0,10	2,2 $\pm$ 0,3	0.30	0.56	30	24 G	E130.1	1 unit(s)	
10.0	0,20	2,2 $\pm$ 0,3	0.30	0.56	30	24 G	E131.1	1 unit(s)	

Needles for gas-tight syringes

ROTH SELECTION.



Not a medical device / Not an IVD product

With Luer-Lock connection

Chamfered tip.

Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Gauge	Art. No.	Pack Qty.	
0.30	0.56	50	24 G	E137.1	5 unit(s)	

With screw-top connection

Inner needle Ø (mm)	Outer needle Ø (mm)	Needle length (mm)	Gauge	Art. No.	Pack Qty.	
0.30	0.56	30	24 G	E132.1	5 unit(s)	

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