

# Technical Information

## Microliter Syringe Operating Parameters

### 600 Series Microliter Syringes

Volume		2.5 $\mu$ L	5 $\mu$ L
Model		<b>62</b>	<b>65</b>
Scale length, mm		27	27
Total scale divisions		50	50
Major graduations, $\mu$ L		0.5	1.0
Minor graduations, $\mu$ L		0.1	0.2
Sub-minor graduations, $\mu$ L		0.05	0.1
Maximum temperature	$^{\circ}$ C	115	115
	$^{\circ}$ F	239	239
Minimum temperature	$^{\circ}$ C	10	10
	$^{\circ}$ F	50	50
Maximum pressure rating	<b>bars</b>	138	138
	<b>psig</b>	2000	2000
Standard needle gauge		22s	22s
Standard needle outer diameter (O.D.)	<b>mm</b>	0.718	0.718
	<b>inches</b>	0.0283	0.0283
Standard needle inner diameter (I.D.)	<b>mm</b>	0.168	0.168
	<b>inches</b>	0.0066	0.0066
Standard needle length	<b>mm</b>	51	51
	<b>inches</b>	2	2
Standard electro-taper		No	No
Standard needle dead volume, $\mu$ L		1.13	1.13

### 700 Series Microliter Syringes

Volume		5 $\mu$ L	10 $\mu$ L	25 $\mu$ L	50 $\mu$ L	100 $\mu$ L	250 $\mu$ L	500 $\mu$ L
Model		<b>75</b>	<b>701</b>	<b>702</b>	<b>705</b>	<b>710</b>	<b>725</b>	<b>750</b>
Scale length, mm		54	54	60	60	60	60	60
Total scale divisions		100	100	100	100	100	100	100
Major graduations, $\mu$ L		0.5	1.0	2.5	5.0	10	25	50
Minor graduations, $\mu$ L		0.1	0.2	0.5	1.0	2.0	5.0	10
Sub-minor graduations, $\mu$ L		0.05	0.1	0.25	0.5	1.0	2.5	5.0
Maximum temperature*	$^{\circ}$ C	50	50	50	50	50	50	50
	$^{\circ}$ F	122	122	122	122	122	122	122
Maximum temperature	$^{\circ}$ C	115	115	115	115	115	115	115
	$^{\circ}$ F	239	239	239	239	239	239	239
Minimum temperature	$^{\circ}$ C	10	10	10	10	10	10	10
	$^{\circ}$ F	50	50	50	50	50	50	50
Maximum pressure rating	<b>bars</b>	138	138	138	138	138	69	69
	<b>psig</b>	2000	2000	2000	2000	2000	1000	1000

Standard needle gauge		26s	26s	22s	22s	22s	22s	22
Standard needle outer diameter (O.D.)	mm	0.474	0.474	0.718	0.718	0.718	0.718	0.718
	inches	0.0187	0.0187	0.0283	0.0283	0.0283	0.0283	0.0283
Standard needle inner diameter (I.D.)	mm	0.127	0.127	0.168	0.168	0.168	0.168	0.413
	inches	0.0050	0.0050	0.0066	0.0066	0.0066	0.0066	0.0163
Standard needle length	mm	51	51	51	51	51	51	51
	inches	2	2	2	2	2	2	2
Standard electro-taper		Yes						
Standard needle dead volume, $\mu\text{L}$		0.64	0.64	1.13	1.13	1.13	1.13	6.81

\*N or LTN Cemented Needle or Luer Tip Cemented Needle syringes only

## 800 Series Microliter Syringes

Volume		<b>5 <math>\mu\text{L}</math></b>	<b>10 <math>\mu\text{L}</math></b>	<b>25 <math>\mu\text{L}</math></b>	<b>50 <math>\mu\text{L}</math></b>	<b>100 <math>\mu\text{L}</math></b>	<b>250 <math>\mu\text{L}</math></b>
Model		<b>85</b>	<b>801</b>	<b>802</b>	<b>805</b>	<b>810</b>	<b>825</b>
Scale length, mm		54	54	60	60	60	60
Total scale divisions		100	100	100	100	100	100
Major graduations, $\mu\text{L}$		0.5	1.0	2.5	5.0	10	25
Minor graduations, $\mu\text{L}$		0.1	0.2	0.5	1.0	2.0	5.0
Sub-minor graduations, $\mu\text{L}$		0.05	0.1	0.25	0.5	1.0	2.5
Maximum temperature*	$^{\circ}\text{C}$	50	50	50	50	50	50
	$^{\circ}\text{F}$	122	122	122	122	122	122
Maximum temperature	$^{\circ}\text{C}$	115	115	115	115	115	115
	$^{\circ}\text{F}$	239	239	239	239	239	239
Minimum temperature	$^{\circ}\text{C}$	10	10	10	10	10	10
	$^{\circ}\text{F}$	50	50	50	50	50	50
Maximum pressure rating	bars	138	138	138	138	138	138
	psig	2000	2000	2000	2000	2000	2000
Standard needle gauge		26s	26s	22s	22s	22s	22s
Standard needle outer diameter (O.D.)	mm	0.474	0.474	0.718	0.718	0.718	0.718
	inches	0.0187	0.0187	0.0283	0.0283	0.0283	0.0283
Standard needle inner diameter (I.D.)	mm	0.127	0.127	0.168	0.168	0.168	0.168
	inches	0.0050	0.0050	0.0066	0.0066	0.0066	0.0066
Standard needle length	mm	51	51	51	51	51	51
	inches	2	2	2	2	2	2
Standard electro-taper		Yes	Yes	Yes	Yes	Yes	Yes
Standard needle dead volume, $\mu\text{L}$		0.64	0.64	1.13	1.13	1.13	1.13

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## 900 Series Microliter Syringes

Volume		<b>5 <math>\mu\text{L}</math></b>	<b>10 <math>\mu\text{L}</math></b>
Model		<b>95</b>	<b>901</b>
Scale length, mm		54	54
Total scale divisions		100	100
Major graduations, $\mu\text{L}$		0.5	1.0
Minor graduations, $\mu\text{L}$		0.1	0.2
Sub-minor graduations, $\mu\text{L}$		0.05	0.1
Maximum temperature*	$^{\circ}\text{C}$	50	50

	°F	122	122
Maximum temperature	°C	115	115
	°F	239	239
Minimum temperature	°C	10	10
	°F	50	50
Maximum pressure rating	bars	138	138
	psig	2000	2000
Standard needle gauge		26s	26s
Standard needle outer diameter (O.D.)	mm	0.474	0.474
	inches	0.0187	0.0187
Standard needle inner diameter (I.D.)	mm	0.127	0.127
	inches	0.0050	0.0050
Standard needle length	mm	51	51
	inches	2	2
Standard electro-taper		Yes	Yes
Standard needle dead volume, µL		0.64	0.64

\*N or LTN Cemented Needle or Luer Tip Cemented Needle syringes only