

# Technical Information

## Syringe Dimensions

### 7000 Series Syringes

Model	Volume ( $\mu$ L)	Outer Diameter Nominal		Inner Diameter Theoretical Bore	
		mm	Inches	mm	Inches
7000.5 (32 gauge)	0.5	7.8	0.308	0.104	0.0041
7000.5 (25 gauge)	0.5	7.8	0.308	0.104	0.0041
7001 (25 gauge)	1.0	7.8	0.308	0.145	0.0057
7101 (22 gauge)	1.0	7.8	0.308	0.145	0.0057
7002 (25 gauge)	2.0	7.8	0.308	0.206	0.0081
7102 (23 gauge)	2.0	7.8	0.308	0.206	0.0081
7105 (24 gauge)	5.0	7.8	0.308	0.325	0.0128

**Note:** The plunger of a 7000 series syringe uses a tungsten wire that travels through the syringe to the tip of the needle. The seal is created by a PTFE ferrule within the knurled hub termination. The I.D. of the needle is honed to fit the tungsten wire. The displacement calculation is based on the O.D. of the plunger wire which is displayed as Theoretical Bore above. The O.D. is the outside diameter of the glass barrel.

### 700 Series Syringes

Model	Volume ( $\mu$ L)	Outer Diameter Nominal		Inner Diameter Theoretical Bore	
		mm	Inches	mm	Inches
75	5	6.6	0.260	0.34	0.014
701	10	6.6	0.260	0.49	0.019
702	25	7.7	0.305	0.73	0.029
705	50	7.7	0.305	1.03	0.041
710	100	7.7	0.305	1.40	0.061
725	250	7.7	0.305	2.30	0.091
750	500	7.7	0.305	3.26	0.135

Volumes are based on 60 mm scale length except models 75 and 701 which are based on 54.1 mm scale length. O.D. dimensions are nominal and typical, I.D. dimensions are theoretical.

### 1700 Series Syringes

Model	Volume ( $\mu$ L)	Outer Diameter Nominal		Inner Diameter Theoretical Bore	
		mm	Inches	mm	Inches
1701	10	6.6	0.260	0.46	0.018
1702	25	7.7	0.305	0.73	0.029
1705	50	7.7	0.305	1.03	0.041
1710	100	7.7	0.305	1.40	0.057
1725	250	7.7	0.305	2.30	0.091
1750	500	7.7	0.305	3.26	0.128

# 1000 Series Syringes

Model	Volume (mL)	Outer Diameter Nominal		Inner Diameter Theoretical Bore	
		mm	Inches	mm	Inches
1001	1.0	9.0	0.355	4.61	0.181
1001.25	1.25	8.6	0.329	5.15	0.203
1002 (thin wall)	2.5	9.7	0.375	7.29	0.287
1002 (thick wall)	2.5	10.3	0.407	7.29	0.287
1005	5.0	13.5	0.530	10.30	0.406
1010	10.0	17.7	0.695	14.57	0.574
1025	25.0	27.1	1.067	23.03	0.907
1050	50.0	36.9	1.452	32.54	1.282
1100	100.0	36.9	1.452	32.54	1.282

Volumes are based on 60 mm scale length except models 1100 which are based on 120 mm scale length. O.D. dimensions are nominal and typical, I.D. dimensions are theoretical.

# Super Syringes

Model	Outer Diameter Nominal		Inner Diameter Theoretical Bore	
	mm	Inches	mm	Inches
S0500	75	2.95	62	2.44
S1000	100	3.95	87	3.44
S1500	100	3.95	87	3.44
S2000	100	3.95	87	3.44